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[Article by I. F. Barybina, L. I. Mokeyeva and T. P. Filippova: "The Improvement of the Economic Mechanism in the Sectors of Industry"]

[Text] The elaboration of the problems of the economic mechanism, which is equal to the economy of mature socialism and the tasks of ensuring the intensive and dynamic development of the unified national economic complex of the country, is a most important task of Soviet economic science. In the report of General Secretary of the CPSU Central Committee Comrade Yu. V. Andropov at the November (1982) CPSU Central Committee Plenum it was noted: "...at the party congresses and the Central Committee plenums we elaborated a scientifically sound policy and adopted the line of the increase of the efficiency of production and its intensification. But the changeover of our economy to this path and the turn to efficiency are still being carried out slowly."[1] For the accomplishment of the posed tasks it is necessary to generalize domestic and world experience of the management of the economy, "to store up the knowledge of the best experienced workers and scientists."[2]

The All-Union Scientific and Technical Conference "The Improvement of the Economic Mechanism in the Sectors of Industry" was held on 6-8 December 1982 in the Economics Faculty of Moscow State University. The basic task of the conference consisted in an attempt to substantiate the content and main directions of the improvement of the economic mechanism in industry, which encompasses all the units of sectorial management.

USSR Deputy Minister of Higher and Secondary Specialized Education I. M. Makarov opened the conference. He dwelt on the economic problems which scientists and experienced workers are called upon to solve for the quickest possible accomplishment of the tasks, which have been posed by the Communist Party and the Soviet Government, of the increase of production efficiency and on this basis the improvement of the material well-being of the Soviet people.

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1. KOMMUNIST, No 17, 1982, p 15.

2. Ibid., p 16.

The work of the conference proceeded in the following directions: the methodological principles of the improvement of the economic mechanism, the organizational structure of management in the sectors of industry, planning in the sectors of industry and the planning of industrial production, the generalization of the experience of cost accounting and economic stimulation in the system of the industrial ministry and the means of their further improvement, as well as the cost accounting system of the organization of the work on the development of new equipment in the sectors of industry, the increase of the influence of the economic mechanism on the efficiency of the use of manpower resources, accounting and economic analysis under present conditions; the experience of improving the operation of the economic mechanism in industry of the CEMA member countries.

The concept of the comprehensive improvement of the main components of the economic mechanism was presented in the report of Doctor of Economic Sciences Professor G. A. Yegiazaryan. He emphasized that the broad and comprehensive program of the improvement of the economic mechanism, which was formulated in the decisions of the 26th CPSU Congress, the Decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979, the decisions of the May and November (1982) CPSU Central Committee Plenums and the speech of Yu. V. Andropov, is a component of the economic strategy of the party.

Three groups of problems were proposed for discussion by the conference participants.

The first group is the general national economic prerequisites of the introduction and functioning of the new economic mechanism. The problems of balance, the creation of a special system of management and special organizational structures, which ensure the introduction of the new system, as well as the problems of the improvement of the general principles of the economic mechanism are among the most important of them.

The means of improving the general principles of the economic mechanism: the problems of the five-year plan as the initial element of the entire system of the rearrangement of the economic mechanism, the optimum combination of centralized management with economic and operational independence, the broadening of the sphere of standardized planning, were examined in detail.

The second group of problems is the elaboration and use of a special system of economic management (levers and stimuli), which ensures the transition from the system previously in effect to a more perfect system of planning and stimulation on the basis of the standard net output.

The examination of the system of general principles of the reorganization of cost accounting and economic stimulation belongs to the third group of problems. It was proposed as an experiment to reject the centralized planning of the standard net output, while having retained and strengthened the centralized planning of the sales volume with allowance made for the fulfillment of the plan of deliveries, as well as to introduce an experimental system of capital formation, planning and evaluation.

While examining the problems of the methodological principles of the improvement of the economic mechanism, those who spoke at the conference noted that it is necessary to examine the economic mechanism, which expresses the set of production relations, which is inherent in socialism, its content and basic properties not in

isolation, but in the system of economic laws and categories. Encompassing the activity of all the units of the management of the national economy, the economic mechanism at the present stage is becoming a most important factor of the increase of the efficiency of social production.

The main attention was focused on the examination of the concept and essence of the economic mechanism, the improvement of the elaboration of the scientific and methodological principles of the formation of an economic mechanism of primarily the intensive type; the prerequisites of the increase of the effectiveness of cost accounting levers and stimuli, the formation of the unified national economic complex, the improvement of the economic mechanism of the interrelations of production and consumption in light of the requirements of the economic laws of socialism and others were analyzed.

The conference participants discussed the directions of the improvement of the structures of management, which conform to the tasks of the increase of the efficiency of the economic mechanism; the questions of the correlation of the centralization and decentralization of the economic units in both the sectorial and regional aspects; the speakers devoted substantial attention to the problems of the integration of sectorial works and to the tasks of the organizational support of national economic programs; they examined the questions of the rationality of the types of organizational structures, which are being planned in connection with the accomplishment of the new and more complicated tasks of management.

The questions of the optimum sizes of the systems of management, the correlation of territorial and sectorial management, the peculiarities of the management of the agro-industrial complex and others were raised at the conference. Proposals on the improvement of the system of management, on the control of the quality of products and services and on the elaboration of the parameters of the quality of management and the identification of its influence on the end results of production were introduced.

The need for the reorganization of the organs of sectorial management and the transformation of ministries from organs of operational management into organs, which are capable of pursuing a unified economic policy in the sector, was also noted (the report of Professor G. Kh. Popov). The question of the importance of the elaboration of standards of the management of associations and enterprises was raised (the report of Doctor of Economic Sciences A. V. Glichev, director of the All-Union Scientific Research Institute of Standardization of the State Committee for Standards).

In the process of the work of the conference much attention was devoted to the improvement of the system of planning, the creation of the general national economic prerequisites for this and the introduction of new indicators of the five-year plan. It was noted that the prevailing practice of planning and stimulation for the percentage of fulfillment of the plan assignments frequently leads to the understatement of the collective plan assignments with respect to the results and their overstatement with respect to the expenditures.

The policy of intensification, the acceleration of scientific and technical progress, the decrease of the scarcity of many resources, the changeover to direct economic ties, the increase of the level of the staff of managers--all this has led

and in the future should lead to the development of independence locally, to the making of management personnel responsible for the very making of decisions and for the level of efficiency, which, in turn, will lead to the adoption of more strenuous plans and to the stepping up of the activity of both managers and workers. These problems found reflection in the report of Corresponding Member of the USSR Academy of Sciences P. G. Bunich, who noted that the evaluation of the activity of enterprises for the level of efficiency is already being realized in the price markups for efficiency and quality, in the decision on the elaboration of uniform standards of stimulation, in the stimulation of the collectives of the Ministry of Tractor and Agricultural Machine Building for the level of use of capacities, in the evaluation of the internal subdivisions of more than 100 enterprises of the Ministry of Chemical and Petroleum Machine Building also for the use of capacities (other indicators of the level of work are also added to this indicator) and in the stimulation of cost accounting brigades. The speaker emphasized, moreover, that in accordance with the economic mechanism of the Food Program the managers and specialists of agricultural enterprises are paid bonuses for each percent of the increase of profitability; the workers of the rayon units of the State Committee for the Supply of Production Equipment for Agriculture, the Scientific Production Association of Agrochemical Services to Agriculture, reclamation organs--for the increase of agricultural output and the profit; the increase of agricultural output is paid for at higher prices. All these markups and bonuses are calculated as compared with the average annual results during the preceding 5 years. For the more extensive use of the new approach it is necessary to fulfill a number of important conditions. Among them are the further expansion of the rights (consequently, also the responsibility of enterprises), the use of centralized economic regulators at the preplanning stage and during the fulfillment of the plan, the use of prices which reflect both the expenditures and the effective impact of the products being made, the development of planned self-financing and the transition to effective sanctions which make up for the harm. An experiment is necessary in order to work out these conditions in advance.

Interesting suggestions were made in the report of D. V. Ukrainskiy, the chief of a department of the USSR State Planning Committee ("The Means of Improving Planning During the 11th Five-Year Plan"), and USSR Deputy Minister of Finance, Doctor of Economic Sciences S. A. Sitaryan ("Economic Standards in the System of the Economic Mechanism"). The experience of the elaboration and use of the indicator of the standard net output was analyzed in detailed. The suggestions on the possibility of using the standard net output for the experimental checking of the evaluation of the fulfillment of the plan of deliveries with allowance made for the contractual obligations, as well as the suggestions on the improvement of operational planning, the planning of the production of consumer goods and the production infrastructure merit attention (the reports of Doctor of Economic Sciences V. M. Ivanchenko and Doctor of Economic Sciences G. Ya. Kiperman).

The methodological and procedural questions of the improvement of planning, the technology and organization of planning and the problems of the improvement of the indicators of planning and the evaluation of economic operations were discussed. The conference participants noted that the main forces should be aimed at the elaboration of a system of indicators which are aimed at the end result. The need for the balance of the plans of enterprises with respect to the volumes and resources in rubles and the products list, the practicable implementation of the standard method at the level of the enterprise and the practicable coordination of the use

resources and the end results was noted. Particular attention was devoted to the increase of the economic liability of management personnal at all levels of planning.

The new proposals on the inclusion in the system of economic methods of the management of industrial production of the stimulation of the efficient use of nature, which were made by Academician T. S. Khachaturov, and of the economic mechanism of the assurance of the unity of sectorial and territorial development within the framework of the five-year plan, which were advanced by Academician A. G. Aganbegyan, aroused definite interest.

The reports of L. A. Busyatskaya, chief of the Planning and Economic Department of the Ministry of Heavy and Transport Machine Building, and P. M. Katsura, deputy general director of the AvtoVAZ Association, which were devoted to the analysis of the comprehensive introduction of plans on the improvement of the economic mechanism in the sector of industry, in large-scale production, aroused great interest.

The questions of the improvement of the evaluation of the activity of the economic units in industry and the efficiency of the use of production resources, the methods and forms of the financing of production expenditures, the problems of the development of the brigade form of the organization of labor in industry, the organization of economic stimulation and so on were examined at the conference. In recent times the role of economic contracts in the evaluation of the activity of industrial enterprises, as well as in the formation of the material stimulation funds in the full amount has increased sharply. The suggestion was made that the further tightening up of planning discipline will require the introduction of material responsibility for the end results of activity, the increase in this connection of the role of the consumer and the adoption of principles of the complete reimbursement of the losses for the violation of economic contracts. Suggestions on the improvement of the system of economic stimulation, particularly on the formation of economic stimulation funds, and the closer coordination of the production development fund with the cost accounting criteria of the activity of enterprises and associations were introduced.

The conference participants came to the conclusion that during the 11th Five-Year Plan the brigade should become the basic form of the organization of labor at the enterprise. In this connection much attention was devoted to the problem of the increase of the efficiency of the brigade form of the organization of labor and the development of brigade cost accounting in combination with the scientific organization of labor and the improvement of the organization of socialist competition. In the report of N. N. Gritsenko, First Deputy Chairman of the All-Union Council of Scientific and Technical Societies, considerable space was allotted to the role of the scientific and technical community in the improvement of economic work in the sectors of industry.

The statements of the representatives of CEMA member countries: the GDR, Bulgaria, Hungary and the CSSR, on the measures being implemented in these countries on the improvement of the mechanism of management were received with great interest.

The discussion of the problems, which are connected with the improvement of the cost accounting system of the organization of the work on the development of new equipment in the sectors of industry, proceeded in the following basic directions:

the socioeconomic efficiency of scientific and technical progress, the improvement of the method of the determination and evaluation of the actual economic impact from the introduction of new equipment, the compilation of comprehensive goal programs of scientific and technical progress, their delivery to the performers and the monitoring of their implementation.

Much attention was devoted to the problems of the improvement of the economic stimulation of the increase of the effectiveness of capital investments (the report of Candidate of Technical Sciences O. I. Novikov).

In the area of the economic and material stimulation of the increase of labor productivity the problems of the increase of the stimulating role of wages (Doctor of Economic Sciences S. I. Shkurko) and the increase of the efficiency of the use of manpower resources (Doctor of Economic Sciences L. A. Kostina) were examined. During the discussion particular attention was devoted to the analysis of those elements of the economic mechanism, which are aimed at the increase of the efficiency of the use of living labor. This is connected with the fact that during the 1980's the aggravation of the problem of the supply of manpower resources and their use is becoming a real fact, which it is necessary to take into account in our economy. Their importance was emphasized at the November (1982) CPSU Central Committee Plenum in the speech of Yu. V. Andropov. He noted that "it is necessary to create such conditions--economic and organizational--which would stimulate high quality productive labor, initiative and enterprise."[3]

The conference participants noted that the economical use of the labor potential of the country is one of the basic means of the further development and improvement of the economic mechanism. First of all it is necessary to ensure the balance of manpower resources and workplaces at the stage of planning. The elaboration of comprehensive goal programs and long-range forecasts of the quantity and qualitative structure of manpower resources is playing an important role here. The improvement of the system of labor planning indicators holds an important place in the increase of the level of planning work in this area. For the purpose of increasing their effectiveness the conference participants made suggestions on the need for the continuation of the elaboration of a system of advanced norms and standards of the expenditures of labor, wages; on the further improvement of the mechanism of the limiting of the number of workers and employees, which has been established at this time. It is proposed to coordinate this indicator with the plan on the increase of labor productivity and the assignments on the decrease of the use of manual labor. During the discussion of the organizational structure of the management of manpower resources particular attention was directed to the improvement of the mechanism of the redistribution of manpower and the search for additional sources of manpower for the needs of the national economy.

In his statement Doctor of Economic Sciences Professor A. D. Sheremet, head of the Chair of Accounting and the Analysis of Economic Activity, spoke about the increase of the role of economic analysis in the improvement of the economic mechanism. The conference participants discussed the questions of the improvement of the analytical indicators and methods of the evaluation of production efficiency and work quality, the improvement of the recording of the expenditures in production in the sectors of industry and the role of the long-range economic analysis in the system

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3. Ibid., p 15.

of production management. Proposals were submitted on the improvement of accounting in the rate setting of production resources, on the need for the supplementation of the basic statutes on the making of an inventory of reserve commodity stocks and the estimation of the line items of the balance sheet with the making of a thorough inventory on 1 December of each year, norms and standards of the cost accounting activity (by the analysis and evaluation of their quality), on the importance of the improvement of statistical reporting, as well as the operational accounting of the consumption of material resources and production waste products and on the organization of the systems accounting of unproductive losses.

In the area of the improvement of economic analysis the conference participants made a number of recommendations, among which is the making of the USSR State Planning Committee, the USSR Ministry of Finance, the State Committee for Science and Technology and the USSR Central Statistical Administration responsible for the elaboration and improvement of standard documents on the economic analysis of the activity of enterprises, associations and ministries, as well as individual regions and the national economy as a whole. In this connection it is necessary to create in these committees functional committees for economic analysis; to introduce more extensively in the practice of the work of planning, design and technological services the operational accounting of the expenditures by items and products, to improve intra-organizational comprehensive economic analysis for the purpose of the most complete identification and evaluation of the reserves of the increase of production efficiency.

The increasing role of foreign economic relations in the development of the USSR national economy and their influence on the increase of production efficiency and work quality were discussed in the section "The Experience of Improving the Economic Mechanism in Industry of the CEMA Member Countries" (the chairman was Doctor of Economic Sciences Professor G. G. Chibrikov, head of the Chair of Economics of Foreign Countries of the Economics Faculty of Moscow State University). The need to bring the mechanism of foreign economic relations in line with the tasks posed by the 26th CPSU Congress and the November (1982) CPSU Central Committee Plenum was voiced unanimously.

The questions of the increase of the cost accounting interest in the increase of the products being produced for export was at the center of attention of those who spoke at the section. The proposals on the inclusion of the economic results of exporting activity in the system of cost accounting of industrial associations as fund-forming indicators and on the inclusion of the currency mechanism in the overall mechanism of the self-financing of enterprises are of interest.

The need for the broadening of the independence of ministries in the sphere of foreign economic activity was noted in the recommendations of the conference. For the purpose of increasing the effectiveness of the material stimuli of the increase of the efficiency of export production it was recommended to increase the role of export bonuses and foreign trade prices. By the common acknowledgement of the conference participants the study of the valuable experience of the fraternal socialist countries in the improvement of the economic mechanism: the experience in the management of intersectorial goal programs in Bulgaria and Hungary, the experience of the standardized planning of the wage fund on the basis of the "balance method," which is used in Bulgaria, the assurance of the close dependence of the amount of the wage fund on the results of the economic activity of enterprises

in the USSR, as well as the adoption of standards of the consumption of material resources of production and their coordination with the system of economic stimulation in the GDR, is of great interest.

The speakers expressed the opinion of the need for the study of the experience in the management of industrial production in capitalist countries. The critical interpretation of the activity of capitalist firms can be of definite benefit for the improvement of the economic mechanism in our country.

The conference participants unanimously noted that the work had proceeded in a creative, businesslike atmosphere.

The conclusions and suggestions, which were expressed by the conference participants, are of definite scientific and practical importance.

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FACTORS, CONDITIONS OF INTENSIFICATION OF SOCIAL PRODUCTION

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 7, Jul 83 pp 26-37

[Article by Doctor of Economic Sciences Professor S. Kheynman: "The Structural and Organizational Conditions of the Increase of the Efficiency of Social Production"; passages rendered in all capital letters printed in boldface in source]

[Text] The 26th CPSU Congress posed the task to complete in the 1980's the changeover of the USSR economy to the primarily intensive means of development. Intensification is the most important condition of the increase of the efficiency of social production.

A Characterization and the Directions of Intensification

The main characteristics of the intensive means of development are: the steady technical improvement of the means of production, the production apparatus and the output being produced, the progress of technology, the assurance of such a functioning of physical production, and first of all the use of production resources, in case of which the real results of production, which have reached use in the sphere of its consumption, would increase more rapidly than the expenditures. Here what is meant is the saving of the aggregate resources of national labor--living and embodied. The more rapid increase of these total expenditures as compared with the results of production is at variance with the intensive means of development. It does make a difference to society, at what cost (by what expenditures of the means of production) the saving of living labor is achieved.

The complete, economical and efficient use of resources envisages environmental protection and the development of the main productive force--the personality of the worker. The intensive means of economic development presumes not the intensification of labor, but the improvement of its content, conditions and organization.

In socialist society intensification should be evaluated on the long-range strategic level. It would be incorrect to regard as an intensive means of development the rapid increase of the results of production, as compared with the expenditures, by means of the use (up to the exhaustion) of the more accessible and inexpensive resources, without regard for the forthcoming expenditures, which are connected with the use in the future of less accessible and expensive natural resources. On this level it is hardly valid to speak of "the extensive means of increasing efficiency," except for the extremely rare instances when it is a question of practically inexhaustible inexpensive resources. But then the policy of intensification

dictates the need for the decrease of their expenditures per unit of the final product.

In the present era not only the level, but also the efficiency of the use of production resources in many ways depend on the implementation of the achievements of scientific and technical progress. At the same time the technical improvement of the means of production and technology in itself still does not ensure an intensive means of development. It is a necessary, but insufficient condition of intensification and should be accompanied by the improvement of the structure and organization of production, which ensure the more complete and efficient use of production resources. The realization of the structural and organizational conditions is a necessary characteristic of intensification.

The implementation of a number of measures on the improvement of the structure and organization of production ensures intensification even in case of the present, formed level of equipment. Thus, the improvement of logging and wood processing, fishing and fish processing equipment is insufficient for the intensification of the development of these sectors without the restoration and reproduction of natural resources and the subsequent complete and comprehensive use of raw materials. The careful restoration and expanded reproduction of timber and hydrobiological resources even on the basis of traditional technology are evidence of intensive development, which is especially important if you take into account the enormous importance of forests, water areas and hydrobiological resources. This conclusion fully applies to agriculture. Thus, THE FUNDAMENTAL COMBINATION OF SCIENTIFIC AND TECHNICAL PROGRESS WITH THE IMPROVEMENT OF THE STRUCTURE AND ORGANIZATION OF THE ENTIRE PROCESS OF THE FUNCTIONING OF THE PRODUCTION POTENTIAL IN CASE OF A STRATEGIC ORIENTATION TOWARD THE LONG-TERM OPTIMUM COMBINATION OF ECONOMICS AND ECOLOGY IS THE MAIN MEANS OF INTENSIVE DEVELOPMENT.

Intensification presumes THE MAXIMUM PRESERVATION OF THE NATIONAL PRODUCT at all the stages of its reproduction. It is pointless and even impermissible to recover the losses by the increase of new resources and the channeling of capital investments into the creation of the latter prior to the elimination of the factors which give rise to these losses. This is an indispensable condition of intensification.

In a society of mature socialism intensification should be connected with the progress of socialization, with the orientation toward the consumer and toward the most complete meeting of social needs. This means that intensification should ensure the achievement of an impact not only for the producer, but also for the consumer of a product. THE ORIENTATION TOWARD THE CONSUMER, CONCERN ABOUT HIM AND RESPONSIBILITY FOR THE MOST EFFICIENT FUNCTIONING OF THIS PRODUCT FOR THE CONSUMER ARE ANOTHER IMPORTANT CHARACTERISTIC OF INTENSIFICATION. Finally, intensification is also characterized by not only the ratio of the amounts and growth rates of the expenditures and results, but also THE SAVING OF PRODUCTION TIME, the acceleration of the process of the production and sale of products.

Such are the basic traits and conditions of the intensification of production. They should permeate the entire fabric of economic, structural and organizational decisions at all levels of the management of the economy. The intensive means requires the implementation of a flexible strategy, the systematic search for and appraisal of the alternatives and the choice of the best version in the organization of production, the development of the sector and the structure of investment decisions.

The Necessity and Possibility of Intensification

The necessity and possibility of the changeover to primarily intensive factors of economic growth are dictated both by the economic, scientific and technical potential of the USSR and by the formed situation with its use in recent years. During 1970-1982 the fixed production capital of the national economy increased by 2.45-fold, the volume of industrial output--by 1.9-fold, the generation of electric power--from 741 billion kWh to 1,366,000,000,000 kWh, the smelting of steel--from 116 million tons to 147 million tons, the output of products of machine building and the petrochemical industry--by 2.4-fold. The production of fuel during 1971-1981 increased from 1.22 billion tons of conventional fuel to 1.94 billion tons, at the same time the production of petroleum and gas nearly doubled. In the annual amount of capital investments the USSR matched the United States.

In agriculture during 1970-1981 the areas under food, technical and fodder crops increased by 8.2 million hectares, irrigated lands--by 6.9 million hectares, reclaimed lands--by 6.8 million hectares. The herd of productive livestock increased by 27.6 million head, the number of poultry--by 415 million (40 percent), the deliveries of mineral fertilizers (in terms of 100-percent nutrients)--by 1.9-fold. The power capacities of agriculture nearly doubled (from 322 million hp to 633 million hp), the consumption of electric power by agricultural production increased by 3.3-fold (from 25.6 billion kWh to 85.4 billion kWh).

During 1971-1981 40 million people graduated from a complete secondary school, 13 million--from secondary specialized educational institutions and 8.2 million--from higher educational institutions. These data attest to the increase of the scientific, technical and spiritual potential of society.

However, not only THE RESULTS IN THE AREA OF THE CREATION OF RESOURCES OF SOCIAL PRODUCTION, BUT ALSO ITS END RESULTS--the national income and its components--the integral fund of national consumption and the accumulation fund, which is called upon to ensure expanded reproduction, are of key importance for the development of the economy and the solution of social problems.

As is known, in the 1970's and the first years of the current five-year plan a lag of the rate and results of social production behind the increase of resources was noted, which testifies to the inadequate use of organizational and structural factors. The efficiency of the use of production accumulation also decreased. Therefore the problems of the use of the resources of production and production accumulation and the possibilities of increasing labor productivity, which are created by the capital-labor ratio, remain very urgent.

The resources of the future are being created today. Whereas in the 1970's with a slowed growth rate of the results of social production it was possible to maintain a comparatively little decreased rate of increase of resources, in the 1980's without the overcoming of these trends such possibilities will hardly be maintained. The slowing of the increase of fixed production capital in 1982 (5.8 percent) as compared with 1980 and 1981 (7.5 and 7.0 percent) attests to this. The urgent need to overcome such trends is obvious.

Under present conditions the rate of economic growth and production efficiency depend to a decisive extent on the following factors:

scientific and technical progress, and first of all the use of its achievements in social production;

the structure of production, which makes it possible to realize effectively the possibilities being created by scientific and technical progress;

the organization of production;

the state of the subjective factor--the general educational and specialized training of people, their social and life position.

The increase of the technical level of the production apparatus and the equipment being produced and the acceleration of the rate of assimilation of the achievements of scientific and technical progress are a constant task. All these are essential conditions of the increase of production efficiency. The tasks of speeding up scientific and technical progress are retaining their strategic, critical importance. At the same time the analysis of economic practice convinces us that among the conditions, which govern the development of the economy, along with technical factors the macro- and microstructures of social production, the available resources and the resources being created; the organization of the process of social production and the functioning of the economic mechanism, and the subjective factor of production (at all its hierarchical levels) are playing a very important role.

The study of the role, importance and conditions of the use of the organizational and structural factors in the development of the economy is an important direction of economic science. It is necessary to devote considerably more attention to it among the problems of the political economy of socialism, in the theory and practice of planning.

Some Structural and Organizational Conditions of Intensification

THE OVERCOMING OF THE EXTENSIVE TRENDS IN THE STRUCTURE OF INVESTMENTS is one of the most important problems with respect to the influence on production efficiency. In recent times they have frequently been writing in the press that intensification requires an increase of the growth rate of capital investments. There is no need to prove that capital investments (of course, given their corresponding material backing) are necessary. At the same time their amount at present is also very great. Therefore the structure of investments, their direction and conformity to the policy of intensification are acquiring enormous importance.

Experience shows that the results of the functioning of the most perfect economic mechanism can be reduced to naught by the inefficient, extensive orientation of the structure of capital investments. What is meant is: the increase of resources without the proper efforts on the elimination of losses; the creation of capacities, which do not ensure the progress of production technology and the high quality of the final product, as well as are insufficiently equal to the social needs. The further intensification of social production is possible only with allowance made for these conditions. The analysis of statistical data for specific sectors convinces us of this.

Thus, during 1966-1980 22.55 billion rubles of capital investments were allocated for the development of the timber and wood processing complex, of them 15.2 billion

rubles were channeled into logging and sawmill operations and the remainder, that is, about a third, was channeled into the pulp and paper industry.[1] So far no substantial reequipment of this complex has occurred. In this case the sulfite processing method, which is oriented toward softwood (with the increase of logging in the northern and eastern parts of the country, where the costs are increasing sharply), and the nonuse of deciduous species and scrap wood predominate in the pulp and paper industry. As a result one-third to two-fifths as great a total yield of products is being obtained from each cubic meter of wood being felled than is possible with allowance made for world experience, while the scraps are approaching half of the amount of logging. The increase of the annual volume of production of paper and cardboard during 1961-1980 in the USSR came to 5.5 million tons, considerably less than in the United States and Japan.

According to the data of the All-Union Bank for Financing Capital Investments, the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry is drawing out the elaboration and implementation of measures on the improvement of the use of scrap wood for technological purposes. In 1985 its level will come to only 39 percent as compared with 30 percent in 1980. And instead of the more complete use of the timber being felled the placement into operation of capacities for the logging of 26.6 million m^3 of timber is being planned. This found reflection in both the plans and the standards. When determining the reserves of timber only a portion of the tree trunk is included in the calculation of the resources. The branches and roots are not taken into account, although they make up 7-10 percent of the mass of the tree and are a full-fledged raw material. Accordingly, the use of the portion of the wood is not envisaged in the plans of enterprises.

The interests of the state require the acceleration of the creation of capacities for the production of technological chips from scraps. But in the meantime for 19 timber managements 64 percent of the capacities for logging and only 18 percent of the capacities for the production of technological chips have been put into operation. It is obvious that the relative decrease of the capital investments, which are being allocated for the efficient use of resources, is unjustified.

A similar analysis in the area of ferrous metallurgy is of no less interest. During 1966-1980 the capital investments in it came to 38 billion rubles. In 1980 the open-hearth production of steel as compared with 1961 had increased by 34 million tons and its proportion came to 60.2 percent. At the same time the structure of rolled products did not change substantially.

The share of plate in the finished rolled products increased in the USSR from 32.2 to 41.5 percent. The share of sheet up to 3 mm decreased from 32.5 to 28.8 percent, from 3 to 5 mm--increased from 15 to 17.9 percent, that is, in all it decreased from 47.5 to 46.7 percent. The proportion of cold-rolled steel sheet increased from 10.9 to 16.2 percent.

The cited comparisons attest to the substantial reserves of the intensification of the economy and all the metal-consuming sectors. The point is that the predominance of graded rolled stock and the small share of sheet and cold-rolled sheet are

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1. In the United States (according to the data for 1958-1976) the ratio was the opposite: 37 and 63 percent.

responsible for the relatively greater metal content of the products of machine building. The dynamics of the production of galvanized sheet and tin plate attests to these trends.

Furthermore, the acceleration of the processes of intensification in the sector itself presumes the building of so-called miniplants, which are capable of using optimally scrap metal and small iron ore deposits. These plants will also promote the combination of the stable loading of metallurgical giants with a limited assortment of rolled products and the supply of machine building and construction with a wide assortment of shape sizes of rolled products. The technical and economic indicators of miniplants merit attention. The specific capital investments per ton of steel in case of their construction are several times less than in case of the construction of large plants. The construction period is 1.5-2 years. Labor productivity comes to 500-1,200 tons of steel per worker, which is two- to fivefold greater than in U.S. ferrous metallurgy. They require less area and do not pollute the air basin.

In light of what has been said the improvement of the structure of the capital investments in ferrous metallurgy is necessary, bearing in mind the increase of the quality of the final product--rolled metal products. Meanwhile 50-60 percent of the capital investments in the development of equipment, which improves the quality of metal, are being assimilated. As a result the smelting of metal in tons is increasing, but the output of the most economical and reliable modern types of rolled metal products, which decrease the metal-output, power-output, capital-output and labor-output ratios of machine building, is inadequate.

As to the prospects of the structure of machine building and metalworking, in which 116 billion rubles were invested in 1966-1980, here it is important to provide the metalworking equipment with a set of replacement and repair assemblies and parts, to increase substantially the output of tools for it and to expand the specialized production of machine tool attachments. In 1981, per 100 workers employed in the production of metalworking equipment, only 26 were employed in the production of tools and 5.5 were employed in the production of machine tool attachments. In other words, ten thirty-firsts as many people were employed in the specialized production of tools and attachments than in the output of metalworking equipment. The formed structure of machine tool building governs the structure of all machine building: about 30 percent of its pool of machine tools are concentrated in tool and die repair shops of machine building plants, which produce for internal needs the lacking assemblies and parts for repair, tools and attachments, and they are worse in quality, less durable and more expensive.

The technical and organizational prerequisites of the supply of the users of the equipment being produced with sets of assemblies and parts for repair have to be created in the other sectors of machine building. In practice little is being done for the modernization of equipment by the forces of the producing enterprises and associations. In this connection the foreign experience of buying, selling and modernizing the used equipment by the producing firms merits attention. They willingly buy or accept for modernization the machines previously produced by them and either restore the initial parameters of this equipment or bring them up to the level of the latest new models. All this sharply increases the technical level of the modernization of equipment and, consequently, its functioning and yields a large saving of metal and other expenditures. Such experience of updating the production apparatus deserves extensive dissemination in our machine building.

Given the universally recognized gains in the development and assimilation of the most complicated modern electronic equipment, the machine building sectors which produce production equipment are counting on the better supply with electronic devices, which in quality conform to the world standards. The rapid development of the production of electronic devices is one of the urgent problems of machine building.

One should especially speak about the development of intersectorial works, which ensure a substantial increase of the productivity of living labor and the saving of embodied labor. It is a question of the increase of the proportion of enterprises which specialize in the production of billets--castings, forged pieces and stampings; parts specialization for the sectors which produce mass products (the automotive industry, tractor building and others); technological specialization, and especially the enterprises of functional specialization, which are the highest form of intersectorial works. These are enterprises and sectors (after the pattern of the production of bearings), which should specialize in designing, technical improvement with the use of the methods of value engineering and the production of functional assemblies and parts, which are common to the most different kinds and types of technical devices.

Such a structural problem as the creation of small machine building enterprises, which fill orders for single-unit technical devices of various types, also merits attention; the need for such products is met at "their own" shops and works, moreover, the pool of metalworking equipment at nonmachine building plants increases.

THE ACCELERATION OF THE UPDATING OF THE PRODUCTION APPARATUS OF THE COUNTRY is an important structural problem. In 1981 for industry as a whole the retirement of fixed production capital came to 1.3 percent, the active portion--machines and equipment--2.3 percent. This does not conform to the rate of scientific and technical progress; the aging of the capital, which increases the amounts of capital and current repair, occurs and affects the quality of equipment and the final product. But it must be borne in mind that with the shortening of the service life of machines and equipment the proportion of replacement will have to be increased, while the proportion of the investments being used for the increase of capital will have to be reduced accordingly. There is one solution to this contradiction--the systematic and substantial increase of the technical level and effective impact of each new generation of equipment which is used for the replacement of the equipment being retired and for the increase of all the operating equipment, with the systematic decrease of the cost and price of a unit of the effective impact.

Taking into account the scale of this problem, first of all the relieving of machine building and the available pool of metalworking equipment from inexpedient operations on the nonspecialized meeting of the needs of the repair and operation of equipment and the production of equipment with excessive dimensional parameters, on the decentralized repair of all types of equipment which breaks down due to poor operation, storage and so on is necessary for its solution.

The freeing of the capacities (nearly 1.2 million units of metalworking equipment), which are being used in the ancillary shops of machine building, should be the first step in this direction. The allocation of special-purpose investments to the machine tool and tool building industry so that it would increase significantly the output of parts and assemblies for the metalworking equipment being produced

for its repair and modernization, as well as would increase the specialized production of tools and machine tool attachments and, accordingly, would remove a large portion of this load from the ancillary shops of machine building itself, could be the initial measure for this. The capacities of the ancillary shops of machine building, which are being freed, should be used first of all for the increase of the output of modern equipment and the rapid replacement of obsolete equipment. At the same time a substantial portion of these capacities can be used for the purpose of producing assemblies and parts for the repair and modernization of the equipment being produced by these sectors, for the formation of a department of machine service, warranty service and repair. This will make it possible to free the ancillary shops and works of nonmachine building enterprises of the need to produce spare parts and assemblies for the crude repair of their own equipment, which will create the possibility for the gradual planned redistribution of the pool of equipment being used at them and its more efficient use.

In this connection the need has arisen for the planning by the Ministry of the Machine Tool and Tool Building Industry of the output of replacement and repair assemblies and parts and standardized tools and accessories for the complete supply of the available pool of metalworking equipment which is being used at the machine building plants of the country. It would be rational to determine, what portion of the machine tools, which are in the repair and tool shops of machine building, can be changed over to the production of new equipment, as well as replacement and repair assemblies and parts for the equipment which is being produced in the corresponding sectors of machine building. It is expedient to accomplish this during the 12th Five-Year Plan. Planning organs are capable of preparing proposals on the efficient (with allowance made for the peculiarities of regions and industrial centers) use of the capacities of the metal-cutting equipment which is being used outside machine building plants, so that during the 12th Five-Year Plan they would begin to provide specific products which are taken into account in the national economic plan. This organizational rearrangement in many ways depends on the local planning commissions.

The questions of the intensification of agriculture are arising in a new way. During 1966-1980 the productive capital investments in this sector came to 288 billion rubles, but the productivity of livestock and the yield of agricultural crops increased negligibly.

Investment alternatives: the increase of the areas and harvests of food crops or the construction of roads and warehouses and the supply of containers, are also arising here. The increase of the livestock population and the construction of expensive barns for its keeping or the development of breeding and genetics and industrial fodder production and the increase and improvement of pasture fodders. The increase of the capacities of tractor and agricultural machine building or the improvement of the quality of equipment and the creation of normal conditions for its assembly locally, operation and storage (the construction of sheds and barns).

When determining the more efficient alternatives of capital investments the potentials of scientific and technical progress and the increasing demands of the economy should be taken into account. It seems that it would be very useful to elaborate in a retrospective manner a more efficient version of the structure of investments over the last 16 years and to see what end results could have been obtained.

THE RAPID DEVELOPMENT AND IMPROVEMENT OF THE PRODUCTION INFRASTRUCTURE--a necessary link of the present-day economy, which meets the demands of the steadily progressing division of labor--are one of the most important structural problems of the coming decades. In turn, the subsectors forming the infrastructure are growing systematically as a result of the progress of the division of labor. The losses of the national product due to its lag frequently exceed the amount of capital investments in the development of this complex. In particular, it is necessary to increase the length and to improve the state of highways, which will lead to a substantial increase of the productivity of motor vehicles. In 1981 the block speed of the trucks of the common carrier motor transport managements was less as compared with several countries. Consequently, a significantly larger pool of vehicles with all that this implies is required for an equal volume of freight traffic in the USSR.

The overcoming of the departmental dispersion of industrial rail transport and all truck transport, in which departmental truck transport accounts for 70 percent of the freight turnover, is a very important organizational problem. This will make it possible to increase the performance of means of transportation and the efficiency of the work of those managements, in which a significant portion of the motor vehicles and other equipment is concentrated.

In connection with a very important structural problem--the complete use of all the useful components of the raw materials being extracted and materials--economic levers, including rent payments, should be used more completely. But among the organizational problems the creation of effective material and organizational stimuli of the orientation of producers toward consumers is acquiring particular importance. The prevailing economic mechanism inadequately stimulates producers in the complete realization of the demands of consumers, which is responsible for the underestimation of the interests of the latter. The manufacturers of series-produced and mass-produced products (materials and tools of labor) are oriented primarily toward "their own" efficiency--the minimum readjustments on the production lines, the maximum sizes of batches and series, the achievement on this basis of "their own" maximum labor productivity. In such a situation a paradox forms: the disregard of the needs of society and consumers is becoming, in reality, a factor of the increase of "efficiency" for the producer.

It is well known that the power and dimensional parameters of some types of technological equipment and production materials exceed the parameters of the operations performed by them. This concerns machine tools, mining equipment, drilling machines, trucks and tractors, electric motors and so on. In many operations their capacities are being used inadequately, frequently half of them, or else a third. A similar problem exists in ferrous metallurgy. It produces a limited number of shape sizes of rolled metal products. At the same time, for example, the West German firm, Kleckner, has in its catalogue 5,000 hot-rolled shaped sections and 10,000 shape sizes, the firm of (Clerveau) (France)--accordingly 1,914 and more than 7,000, the firm of (Ukosidor) (Belgium)--1,547 and more than 5,300. In the USSR at the beginning of 1982 the assortment came to about 4,000 shape sizes. Such a situation, while ensuring an increase of "one's own" labor productivity in ferrous metallurgy and the "efficient" use of rolling mills, promotes the increase of the metal content and labor-output ratio in machine building and the increase of the amount of chips "being produced."

Just as with the acquisition of equipment, the expenditure principle of the determination of the price leads to the "tolerance" of the consuming enterprises with respect to the increase of the price of means of production and to their purchase with excessive parameters and relatively overstated prices. It is possible to say that in practice economic indifference to the value of fixed and working capital frequently exists. The consuming enterprises do not strive for deliveries at lower prices. It is necessary to change radically such a situation, which is hindering technical progress and is decreasing production efficiency.

Of course, state price policy is a most important tool, which promotes the solution of this problem. It is obvious that the prices should not be constructed in accordance with a principle which reflects, in essence, any expenditures which ensure under all conditions the "profitability" of production. They should be oriented toward the socially necessary expenditures and the conditions which make possible the delivery of the given item at a price which conforms to a high level of production efficiency (and, consequently, compels the producer to do this), and should be constructed on the basis of the systematic decrease of the cost of a unit of the effective impact (productivity). One of the important functions of pricing lies in this.

The problem of the inadequate level of specialization and the losses due to this has already been covered on the pages of PLANOVOYE KHOZYAYSTVO. In connection with these trends a paradox is arising: the enterprise does not carry out specialization and strives for a closed cycle, while the economy as a whole bears the harm from this. Such a situation is frequently aggravated by the lack of balance of the plans, which creates objective obstacles to the accomplishment of cooperation. The lack of discipline of suppliers also has an effect.

THE IMPROVEMENT OF THE ORGANIZATION OF PRODUCTION AT ENTERPRISES, IN SHOPS AND SECTIONS is among the major problems of the intensification of social production. Here the problems of increasing the labor productivity of the bulk of the working people are solved and there are many untapped reserves. The work of auxiliary services--the repair and tool services, intraplant transport and others--has to be improved substantially. At present about 15 million auxiliary workers are employed in industry. Moreover, in the past 10 years their share has increased by 2 percent. This means that auxiliary workers made up 63 percent of the increase of the number of industrial workers during this period. An overwhelming portion of them are engaged in manual labor.

The decrease of the proportion of those employed in auxiliary services would make it possible to free a significant number of workers. The efficient organization of repair work both along the lines of the producers of the equipment, who have to provide all the equipment being produced by them with a complete set of replacement and repair assemblies and parts, firm warranty repair and service and along the lines of the users of the equipment, who do not organize efficiently enough the operation and repair of the equipment, conforms to this goal. It is also a matter of the significant expansion of the specialized production of tools and the acceleration of the formation of a sector for the specialized production of machine tool attachments.

The equipment and organization of intraplant transport require improvement. At a number of enterprises they are insufficiently concerned with the study and the shortening of the routes of parts, the improvement of the spatial layout of the

sections and shops, the development of efficient containers for intraplant transportation and so forth. It is well known that among the several tens of millions of people engaged in manual labor a large portion is being used in the transportation and handling of freight.

What are the means of solving this set of socioeconomic problems from the standpoint of intensification? The conventional answer is: complete mechanization, automation, robots and, of course, the appropriate investments. But meanwhile in precisely this sphere much depends on the organization of production. Of course, one must initially eliminate a large portion of the inefficient processes of transportation and handling on the basis of the study of their length in space and time and the improvement of the organization of production in space, and only after this is it possible to start to work on mechanization and automation. Without this complete mechanization, as paradoxical as this is, signifies an extensive means of the increase of labor productivity. The organization of production in the basic shops--the standardization of assemblies and parts, the introduction of various versions of flow methods, as well as the scientific organization of labor--merits considerably more attention of experienced workers and sectorial science. The problems of the creation of flexible forms of the organization of production, which make it possible to change over production lines quickly and with the minimum expenditures to new types of products, are urgent. The principles of ergonomics have to be used more extensively in the process of the designing of equipment, technology and the organization of production. The creation and development in ministries and at large enterprises of services of the organization of production are necessary; these problems require special elaboration when designing new enterprises and renovating operating ones.

Intensification (the progress of equipment and technology) presumes THE ASSURANCE OF THE MATERIAL INTEREST OF ENGINEERING AND TECHNICAL PERSONNEL IN THE PROGRESS OF PRODUCTION and the improvement of the wage of engineering and technical personnel. It is necessary to increase the interest in holding engineering positions and to create stimuli for the display of engineering and administrative initiative. In the number of engineers the USSR has surpassed the United States by several times, but their output lags substantially. An important organizational factor of the intensification of production--the initiative of technical personnel--should be utilized more completely.

Along with the improvement of the structure and organization of social production THE IMPROVEMENT OF THE SUBJECTIVE FACTOR--the first productive force of society, the formation of the new man--is a most important condition of the changeover of the economy to the intensive means of development. The subjective factor in many ways determines the state and dynamics of production, its structure and organization. The level and quality of technical, structural and organizational decisions, as well as both the possibilities and the obstacles of their effective implementation depend on it. As is known, in case of changes in the economic mechanism--the introduction of the indicators of sold output, the standard net output and so on--economic managers frequently seek means for the "derivation" of satisfactory indicators in case of insufficiently good work. Consequently, it is a matter of the social and life position of the participants in management.

The policy of intensification implies the better use of production resources and the obtaining by means of this of a greater effective impact, which in many ways

depends on people. For intensification is dependent not only on macrostructural and macro-organizational decisions, but also on the decisions which engineers and workers make, and, hence, the "quality" and social position of workers is a mighty factor of intensification and economic growth.

Thus, the subjective factor is an economic category, and along with educational and political measures the economic measures, which are necessary for its improvement, should be one of the leading directions of the structural and organizational policy. This is true especially as the formation of the new man and the most complete meeting of his increasing needs are the main goal of both phases of the communist formation. The elaboration of the methodology and the determination of the effectiveness of the measures on the improvement of the subjective factor and the analysis of the losses, which stem from its shortcomings, are a vital task of economic science.

The causes of the lag of the subjective factor are due, in particular, to the shortcomings of the material and technical base of the complex of sectors of the nonproduction sphere, which are connected with the reproduction and improvement of man, with the productive use of his free time; to the small proportion of this complex in the structure of the resources of expanded reproduction and the poor development of a number of the structural subdivisions which ensure the successful functioning of this sphere. The share of the nonproduction sphere in the fixed capital of the national economy decreased from 43 percent in 1960 to 38.3 percent in 1970 and 33.6 percent in 1981. There is also a similar trend in the structure of capital investments. During the 7th Five-Year Plan the share of the basic sectors of this sphere (housing services, education, culture, art and science) came to 24.8 percent, the 8th Five-Year Plan--23.2 percent, the 9th Five-Year Plan--20.5 percent, the 10th Five-Year Plan and 1981--18.7 percent.

It seems that the direct losses and unrealized possibilities, which are connected with the shortcomings of the subjective factor, are significant and can be sharply decreased by the development of the material and technical base of the nonproduction sphere. This is a long-term strategic task and is among the basic directions of the structural policy, as well as among the most important tasks which are accomplished in the process of improving and developing production relations and the superstructure.

It is obvious that the lack of settlement of the questions of the structure and organization of social production entails substantial expenses both in the form of the direct loss or excessive expenditures of specific amounts of living and embodied labor and in the form of losses which appear in the form of unrealized possibilities in the area of the increase of the results of production and the decrease of the expenditures of production resources. The need has arisen for the organization of the systematic differentiated accounting of the losses, which shows not only their total amounts, but also at what stages of the process of reproduction and for what reasons they form. Here, in our opinion, there is a serious gap in economic science and in the activity of planning and statistical organs. The aggregate and sufficiently differentiated calculation of the losses and the obtaining of an "anatomy" of the losses are a most important national economic task. It suggests the need for an approved classification and method of accounting of the losses, which are connected with the technical level, structure and organization of social production, as well as the state and behavior of the subjective factor. This

is a question of the sources of expanded reproduction, the use of the resources of social production, the obstacles and conditions, the routes of intensification. A knowledge of the direct losses of the elements of the national product and the unrealized possibilities of its growth and saving--the determination of their quantitative amount (physical and value)--is a necessary condition of the choice of priorities in the structure of investments and the assurance of the great efficiency of production accumulation.

We have already spoken above about the losses connected with the imperfection of the infrastructure. But what does the lack of conformity of the parameters of equipment, the sizes of rolled metal products and so forth to the parameters of their actual operation cost (in metal, machine tool-hours, electric power, labor and money)? How many unnecessary expenditures and unused resources are caused by the time lag and conservatism of the structure of investments, the technological structure and the basic sectorial complexes? How much is overpaid to careless workers, whom the administrator is still not always capable of firing, and how much less is received than due because stimuli have not been created for those who work better?

A detailed accounting of the expenditures on the offsetting of losses by importing the corresponding products is required. It is necessary to make systematically detailed calculations of the excessive expenditures (and, consequently, the losses) which are due to insufficiently specialized production. This would show clearly the "convertibility" of the losses into investments, would reveal their increase and the limitations of the expenditures on measures which prevent losses and would make it possible to obtain a complete idea of the actual resources for consumption and accumulation, which society has. Such knowledge itself will promote intensification. Perhaps the indicator of the used national product with the exclusion from it of all the losses of produced output should be introduced.

The accounting of the realized end results of production is important for socialist society. It is necessary to be guided by it when drawing up the national economic plan and elaborating investment programs, since the expenditures, which are connected with the losses in the process of reproduction, and the investments, which are allocated for measures which eliminate and prevent these losses, in our opinion, are equivalent and in the end are interchangeable.

The problem of determining the losses is closely interconnected with another organizational problem--with the use of indicators which frequently do not reflect the actual consumer impact which one product or another yields, as well as with the information which does not reflect the real dynamics and volumes of production. Rolled metal products, not only sectional, but also sheet metal products, are taken into account not in meters, but in tons; paper is taken into account not in meters of area, but in tons, many types of equipment are taken into account in tons, the grain harvest is taken into account according to the "hopper" yield and so on. The intolerable, condemned practice of additions and the direct or indirect overstatement of the quantitative and qualitative results of the work of enterprises, as well as the frequently groundless adjustment of the plans are also associated with this. Such a practice leads to very adverse consequences of a social nature, and therefore vigorous steps on its elimination were required.

Such are several organizational and structural problems of the development of the economy and the possible means of their solution. Their implementation is ripe and is due to the need for the consistent implementation of a purposeful and long-range strategy. And first of all it is necessary to overcome the barriers of extensive thinking in the sphere of economics.

Speaking at the November (1982) CPSU Central Committee Plenum, General Secretary of the CPSU Central Committee Yu. V. Andropov said that every ministry and department must analyze again and again in a most careful manner the state of affairs, outline and implement measures for the solution of the existing problems. The main criterion, in accordance with which they should evaluate their work, is the degree of satisfaction by the sector of the constantly increasing social needs.

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PRESSING PROBLEMS CONFRONTING LOCAL PLANNING ORGANS

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[Article by N. Zenchenko, deputy chairman, RSFSR Gosplan]

[Text] The expanding scale of social production and the increasing complexity of interbranch relations require the ever broader participation of the planning organs of the local Soviets in the coordination and monitoring of the activity of enterprises, organizations and construction projects situated on their territory irrespective of their departmental affiliation.

The introduction of the system of measures contained in the decree of the CPSU Central Committee and USSR Council of Ministers (12 July 1979) on improving the economic mechanism and the decree of the CPSU Central Committee, Presidium of the USSR Supreme Soviet and USSR Council of Ministers (19 March 1981) on the further raising of the role of Soviets of People's Deputies in economic construction made it possible to create the necessary legal, organizational and methodological basis for improving the planning of economic and social processes and for raising the level and style of work of planning organs.

Nonetheless the task of developing the economy, of increasing the effectiveness of production and of strengthening the social orientation of the plans requires improvement of forms used in the management of the national economy. Among the urgent problems are: the system of economic management; the acceleration of scientific and technical progress in the national economy; raising the role of republics, krays and oblasts in resolving issues related to the satisfaction of the population's needs, etc. The realization of these tasks requires the conceptualization of accumulated experience and the elaboration of new measures for the further improvement of planning and management.

Integrated planning problems

In recent years, there has been considerable improvement in the interaction of planning organs of autonomous republics, territories and oblasts in the Russian Federation with enterprises and organizations of union and republic (RSFSR) subordination, which promoted improvement in the quality of plans for economic and social development and their balance under the 10th Five-Year Plan. This work is also proceeding successfully under the current five-year plan. National income produced in the RSFSR in 2 years of the 11th Five-Year Plan increased by 6.4 percent. Industrial output rose by 5.6 percent compared with 1980, including a 5.7 percent increase

in the production of the means of production (Group 'A') and a 6.5 percent increase in the production of consumer goods (Group 'B'). Atomic energy, machine building, and the gas, chemical and petrochemical industry are developing at an accelerated rate. Measures are being taken to implement the USSR Food Program and to strengthen the material and technical base of agriculture and other branches of the agro-industrial complex.

The Russian Federation is actively forming and developing territorial production complexes and is implementing integrated economic, scientific-technical, social and territorial programs. It is making the transition to the integrated planning of the economy of autonomous republics, territories and regions. The plans are developed on a unified methodological and organizational basis and include all enterprises and associations irrespective of their departmental subordination.

The most active effort to compile integrated territorial plans and to coordinate the activity of enterprises and organizations situated in a given territory is conducted by planning commissions in Moscow, Leningrad, Perm, Tyumen and Sverdlovsk Oblasts. The Sverdlovsk Oblast planning commission can serve as an example in this regard. Starting with the 9th Five-Year Plan, the oblast has made it a practice to develop integrated five-year and one-year plans. In addition to indicators of development of the local economy, these plans incorporate basic indicators of plans of enterprises and organizations of union and republic subordination for the production of industrial goods and consumer goods, for construction, for nature conservation, and for sociocultural and domestic services. All rayon, city and most settlement and village Soviets have drafted and are implementing integrated plans for economic and social construction in this oblast during the 11th Five-Year Plan period.

A major effort to compile integrated territorial plans and to organize the monitoring of their implementation has been made in cities and rayons in the Bashkir and Tatar ASSR's. The consolidated integrated plan for the economic and social development of Kazan includes enterprises situated in the city; indicators regarding the overall volume of industrial production, capital construction, the production of consumer durables, and sociocultural measures. Much attention is devoted to the effective use of material, financial and labor resources.

At the same time, the experience of drafting and implementing one-year and five-year plans for the integrated economic and social development of autonomous republics, krays and oblasts shows that there are still many problems that await their solution and this means that we must continue work on the further improvement of a system for drafting plans and on strengthening plan discipline. Mechanisms for stimulating the growth of production and labor productivity and for organizing the interaction of union and republic ministries and departments with local Soviets, the system of norms and plan indicators and the entire system for organizing the drafting of plans for economic and social development also need to be improved.

The result of the insufficient coordination of various aspects of branch and territorial planning is that in the process of compiling plans for the development of various branches, many ministries do not always proceed from available resources and plan new construction without taking measures

to increase the effectiveness of the work of existing enterprises and organizations. The creation of new workplaces and the considerable increase in the manpower requirement associated therewith do not make it possible to secure balance of the city-forming and city-supporting spheres in the economic development of autonomous republics, krays and oblasts.

Much still remains to be done to use existing possibilities (both in the center and at the local level) to draft and implement plans for the integrated economic and social development of autonomous republics, krays and oblasts, to mobilize interbranch resources and to prevent national economic disproportions and parochial decisions.

In the RSFSR, there are 22,000 industrial enterprises belonging to 74 union, 13 union-republic and 30 republic ministries and departments; 24,000 kolkhozes and sovkhozes; over 4,000 interfarm enterprises; and a large network of consumer service and sociocultural institutions. Such scale of the productive and nonproductive spheres naturally requires the precise coordination and effective interaction of branch and territorial organs of planning and management.

It is no easy matter to attain unity in the elaboration of plans at all these levels because there are no regular deadlines for drafting the plans, because the forms and indicators of the plans are constantly changing, and because many ministries are remiss in supplying the plan documents to enterprises and local Soviets.

With the aim of further improving the integrated economic planning of autonomous republics, krays and oblasts, the existing system of territorial planning should be expanded in such a way as to gradually introduce organizational methods and planning procedures that are being adopted at the present time in Moscow, Leningrad, Leningrad Oblast and Krasnoyarsk Kray.

In order to diffuse this experience more widely, we should carry out a number of organizational measures and in particular should create a unified stable system for organizing work on the compilation of territorial plans and should organize interrelations from the bottom to the top between branch and territorial organs of management and planning. We should revise the Model Guidelines for Compiling Plans for the Economic and Social Development of Autonomous Republics, Krays, Oblasts, Okrugs, Rayons and Cities, which were devised in 1982 (taking into account the experience derived in drafting the plan for 1983) so that the plans will reflect entities belonging to all branches of material production and the nonproductive sphere irrespective of their departmental subordination. We should also consider the elimination of the large number of plans that are drafted and ratified because they frequently duplicate indicators. Presently developed separately are: plans for the economy that is subordinate the the various Soviets of People's Deputies; basic indicators of plans for the economy of higher-echelon subordination; and basic indicators for the territory of a given local Soviet in general. In addition, consolidated plans are developed for: the production of local construction materials; the production of consumer goods; and the construction of housing, municipal, cultural and consumer service facilities.

The practice of drafting consolidated territorial plans shows that they are not compiled earlier than April or May of the planned year and therefore they cannot fully function as an active instrument for the economic development of a region.

We believe that in the interest of increasing the influence of Soviet organs on raising the effectiveness of the work of associations, enterprises and organizations situated in a given territory, we should gradually make the transition to the practice of drafting and ratifying unified plans for the comprehensive economic and social development of autonomous republics, territories, oblasts and union republic as a whole and that these plans should contain two types of independent indicators: indicators for the economy of local and republic (RSFSR) subordination and basic plan indicators for enterprises and organizations of higher subordination situated in the given territory. Production targets relating to local construction materials, consumer goods, the construction of housing, municipal service, cultural and domestic service facilities must be included in the indicated plans according to the subordination of the enterprises.

Scientifically substantiated methods for the integrated territorial planning of the economic and social development of autonomous republics, krays, oblasts, cities and rayons should be devised with the participation of institutes of USSR Gosplan and the gosplans of union republics in order to secure the rational combination of branch and territorial sections of plans; to achieve integrated planning at all levels of the national economy (republic, kray, oblast); to increase the proportionality of the plans; and to bring order to the drafting of territorial plans. These methods should provide for:

--the establishment of a unified, stable system for organizing work on the compilation of territorial plans with the aim of raising the scientific substantiation of these plans, of securing the broad use of balance calculations, the methods of mathematical economics and computers, and of systematically and effectively monitoring the course of fulfillment of plans for integrated economic and social development;

--a system of indicators of plans for the integrated economic development of autonomous republics, krays and oblasts encompassing all branches in the sphere of material production and the nonproductive sphere irrespective of their departmental subordination on the basis of the reciprocal coordination of the projections of ministries and departments of the USSR and the union republics and the calculations of territorial organs characterizing interbranch and territorial proportions, stages and directions in the economic and social development of various regions; and a system of territorial balance calculations;

--conditions for planning the national economy's most effective utilization of mineral, raw material, fuel, energy, land, water and timber resources; nature protection measures; and the determination of regionally differentiated rates of payment for the use of natural resources.

In connection with the difficulty of siting new enterprises owing to the increasing complexity of the demographic situation, we should institute a new procedure for siting the productive forces in such a way that would take the interests of the entire national economy into account and exclude parochialism. The development of such a procedure must be based on feasibility studies, on the selection of regions and sites for industrial construction, on the idea of developing most important territorial production complexes and industrial centers; on principles regulating the development of cities; on principles that stimulate industrial construction in small towns and medium-size cities and that simultaneously restrict the further concentration of industry in the largest cities.

Limits on the size of the work force--a key instrument in economizing labor resources

Planning the size of the work force is an especially urgent question under present conditions. Councils of ministers of union and autonomous republics and executive committees of kray and oblast Soviets of People's Deputies, using the rights granted to local organs of power, carry out a significant effort to make rational use of labor resources through their labor departments and planning commissions.

Under the current five-year plan, the growth rates of labor resources will decline to one-third of the the level of the preceding five-year plan. At the same time, industry, construction and transport constantly require new workers. The only way out is the intensification of production.

There are 66.7 million persons employed in various branches of the RSFSR economy. During the 10th Five-year Plan, the work force increased by 5.2 million; during two years of the 11th Five-Year Plan--by only 0.8 million.

The share of manual laborers in our republic is still high. In 1982, the number of manual workers (aided by mechanisms and machines) in industry alone comprised more than 33 percent. They constitute a vast manpower reserve which attests to the relative nature of the existing manpower shortage.

The establishment of limits on the size of the work force in associations, at enterprises and in organizations specified in the 12 July 1979 decree of the CPSU Central Committee and the USSR Council of Ministers on improving the economic mechanism and the 19 March 1981 decree of the CPSU Central Committee, the Presidium of the USSR Supreme Soviet and the USSR Council of Ministers on further raising the role of Soviets of People's Deputies in economic construction must become an effective condition to the rational use of labor resources.

The establishment of limits on the size of the work force in annual plans during the first 3 years of the 11th Five-Year Plan made it possible to perform a certain amount of work to ensure the most economic use of labor resources especially in Moscow, Moscow Oblast, the Tatar and Bashkir ASSR's, and Leningrad, Sverdlovsk, Bryansk and Yaroslavl Oblasts.

In 1981, the growth of work force size was coordinated in 43 autonomous republics, krays and oblasts. In 1982, such coordination was carried out with all councils of ministers of autonomous republics and with the executive committees of kray and oblast Soviets of People's Deputies. The increase in work force size requested by enterprises was reduced by 34 percent in 1982 and by 35 percent in 1983. This has facilitated the better distribution of labor power among various branches of the national economy.

A number of planning organs have set up special subdivisions for the purpose of conducting this work. Thus the planning commission of the Yaroslavl Oblispolkom established a division for the development of the productive forces and manpower balances which has the responsibility of analyzing the dynamics and volume of production and of increases in labor productivity in oblast associations and enterprises irrespective of departmental subordination, of making recommendations to the oblispolkom on the establishment of work force size limits and of communicating these recommendations to the enterprises. As a result of work performed by the oblast planning commission, the manpower requirement in the first year of the five-year plan period throughout the oblast as a whole decreased by 2700 persons compared with 1980 and over a 2-year period decreased by 6000.

The Yaroslavl Oblast Planning Commission took a businesslike approach to the coordination of work force size for 1983. The oblast planning commission and city planning commissions have carefully analyzed the validation of draft plans and the possibility of increasing labor productivity through its mechanization and automation and through the improved use of internal production reserves. From year to year, enterprises are to a significant degree relieved of the necessity of increasing the size of their work force because city organizations are increasingly assuming the responsibility for increasing the volume of social, consumer and municipal services. Local organs of power are planning the development of the urban economy, preschool institutions and public transit in order to more completely satisfy the needs of the working people. This is a manifestation of the efficacy of the combination of branch and territorial planning.

Bryansk Oblast established an interbranch commission, headed by a deputy chairman of the oblispolkom, for the purpose of coordinating work force size limits with available manpower. As a result of the study of proposals by enterprises and associations on work force size limits, 42 of the requests to increase work force size were rejected (including requests submitted in behalf of the Dyadkovskiy Crystal Plant and the Lyubokhonskiy Iron Foundry which belong to the RSFSR Ministry of Construction Materials).

One of the basic conditions to coordinating increases in work force size was the coordination of these increases with available manpower. Thus, eight Dyadkovskiy Rayon enterprises and organizations belonging to the USSR and RSFSR Ministries of Construction Materials were refused permission to increase the size of their work force because there was no available uncommitted manpower in that rayon.

Individual associations and enterprises are authorized to increase the size of their work force only for the purpose of staffing newly activated kindergartens and day care nurseries, of staffing subsidiary farms; some enterprises are authorized to increase the size of their work force in order to operate new production facilities.

In the remaining instances, the interbranch commission called for a 1-2 percent reduction in work force size at existing enterprises. As a result of the coordination of increases in the size of the work force, there was a saving of manpower (more than 6000 persons).

It is estimated that as a result of the implementation of proposals by associations and enterprises, the increase in the volume of industrial output due to higher labor productivity was 85 percent and that when the reduction of work force size is taken into account, this increase will be equal to 95 percent.

The labor department of the oblispolkom together with the planning commission are monitoring the correspondence of work force size to labor plans. As a result of checks, more than 100 enterprises and organizations have been notified that they must bring the size of their industrial work force into line with the labor plan. The Gosbank branch office applied a special norm on wage funds in the case of 12 enterprises that maintained a larger work force than authorized by the plan and that failed to fulfill labor productivity targets.

At the same time, the study of experience shows that the work force size limits are not imposed uniformly everywhere and are not as successful as they should be. There are still serious shortcomings in the effort to coordinate work force size. Some ispolkoms agree to increases in work force size that significantly exceed the actual possibility. Thus according to balance calculations, in Gorkiy Oblast it was possible to increase work force size by only 3000 persons even though enterprises were authorized to increase it by 10,200. Requests for manpower exceeded the authorized work force by 4900 persons in Sverdlovsk Oblast; by 4200 persons in Perm Oblast, etc. Even though Kalinin Oblast has no manpower reserve whatsoever, the oblispolkom agreed to increase the work force by 5600 persons.

Not only did many councils of ministers of autonomous republics and ispolkoms of Soviets of People's Deputies fail to see to it that existing enterprises reduced their industrial production work force by 1-2 percent in 1982 and 1982 but they even supported requests by enterprises to increase the aggregate work force by 350,000 persons.

Some RSFSR ministries and departments, e. g., the Ministry of the Textile Industry, the Ministry of Light Industry and the Ministry of the Meat and Dairy Industry, are permitting serious shortcomings in the coordination of increases in work force size. Last year, ministries and departments did not convey control figures on work force size to subordinate enterprises and organizations and did not forewarn them that increases in work force size at existing enterprises would be permitted only in exceptional cases.

As a result, work on coordinating increases in the size of the work force at most enterprises proved to be unnecessary and led to unwarranted expenditures of time by the staff of ispolkoms of Soviets of People's Deputies, associations and enterprises. Thus, 72 enterprises belonging to the RSFSR Ministry of Light Industry coordinated increases of 2950 persons in work force size with ispolkoms while ministries assigned these enterprises a limit for 1983 that involved a reduction of 5611 persons. A similar situation prevailed at enterprises belonging to the RSFSR Ministry of the Food Industry.

Under the existing procedure, bank sanctions for maintaining manpower in excess of the authorized limit do not exten to all enterprises. In 1981, these sanctions were invoked against only 564 enterprises (14 percent of their total number) violating this limit. Wage funds were reduced by a mere 1.5 million rubles or 1 percent of the wages for the work force in excess of the number authorized by the plan. In the first half of 1982, these sanctions were invoked against 369 enterprises (eight percent of all enterprises).

We should also think of a stricter approach to current bonuses for the basic results of economic activity, the terms of which are elaborated by ministries and branch trade union committees. Bonuses should depend directly on the end result. "Bad work, inactivity and irresponsibility," Yu. V. Andropov, general secretary of the CPSU Central Committee, noted in his speech at the November (1982) Plenum of the CPSU Central Committee, "must be most directly and inevitably reflected in the material rewards, in the official position and in the moral authority of officials."[1]

The proper organization of the effort to coordinate limits on the size of the work force is an important condition to economizing labor and to increasing the effectiveness of production.

Problems in formulating the consolidated section for the complex of measures in the area of social development

Many years of experience in socialist planning shows that national economic plans have always included not only problems of economic construction but problems of social development as well. The social problems have taken the form of a broad spectrum of processes in social life: the social and class structure of the population, working conditions and the character of labor, the upgrading of the skill levels of the working people, the availability of material and nonmaterial goods to the population, etc.

Naturally the nature of the problems to be resolved in the plans changed in various stages of socialist construction. With the development of the theory and practice of social planning, it became possible to penetrate more deeply spheres of social life that previously received little or no attention from planners.

The party's policy of continuously improving the well-being of the people, of improving the living conditions and improving man himself in every way is based on Lenin's premise that social production under socialism will develop "...for the full well-being and free, all-round development of all members of society."[2]

The expanding possibility of improving the people's well-being is to a decisive degree determined by the development of the productive forces, by growth rates and by the effectiveness of production. In 1980, national income for the country as a whole was 437 billion rubles in comparable prices. This was 21 percent more than in 1975 and 1.5-2.2 fold more than 10-15 years ago. The real incomes of the working people also rose accordingly. The 11th Five-Year Plan calls for increasing national income by 18 percent and for increasing the population's real income by 16.5 percent.

The practice of elaborating social problems in national economic plans has shown that this matter requires the organization of the clearly directed actions of many branches of the economy, ministries, departments and local Soviets of People's Deputies. It is specifically in the process of elaborating territorial plans and organizing their fulfillment that the Soviets encounter various departmental interests that hinder the comprehensive resolution of social problems in accordance with measures to develop production and construction and to introduce new technology. Thus in the last five-year plan, the Ministry of the Chemical Industry concentrated all its efforts on the creation of new chemical industry capacities in the RSFSR but is unable to utilize them because it did not allocate funds for housing construction in good time and because of insufficient manpower. Measures are now being taken--capital investments are diverted from other projects--to accelerate the construction of housing but it is already too late.

Another example. Funds allocated for the construction of sociocultural facilities under the last five-year plan and in the last two years of the current five-year plan are not being used satisfactorily. While the RSFSR capital construction plan was fulfilled in general, the housing construction plan in 1982 was fulfilled by 95.1 percent; the plan for the construction of general education schools--by 88.6 percent; preschool institutions--by 97.1 percent; and hospitals--89.4 percent. Even Tyumen Oblast, which has a continuous need for an influx of manpower and which spends enormous sums to develop the oil and gas industry and to increase the production of oil and gas, fulfilled its housing construction plan by only 87.7 percent; the plan for the construction of preschool institutions--by 80 percent; and the plan for hospital construction--by 62 percent.

The vast scale of social measures and their integrated character make increasingly complex demands on the organization of the formulation of plans for social development and for improving the people's well-being. The 12 July 1979 decree of the CPSU Central Committee and the USSR Council of Ministers on improving the economic mechanism called for consolidated sections for the complex of measures in the area of social development These sections must reflect measures to improve working conditions, to upgrade the skill level and occupational proficiency of the work force, to improve housing, cultural and everyday living conditions; to improve medical care, etc.

The drafting of plans for social development and for improving the well-being of the people at various levels of planning and management must be improved for a number of reasons. Today there is increased emphasis on

the role of social factors in the development of production and the service sphere. Scientific and technical progress and the increasing complexity of production and labor processes make higher and higher demands on the educational and cultural level of workers, on their occupational knowledge and proficiency. High-quality vocational training and a high general cultural level are becoming a necessary condition to successful labor and the improvement of the well-being of the working people becomes an increasingly urgent requirement of economic development proper.

Territorial differences in the living standard have a direct influence on the general conditions of reproduction of the population and labor resources, on all aspects of the demographic situation and in particular on the migration of the population and on the supply of a sufficient quantity of properly trained manpower to farms in the various rayons. Economic differences in living standards from rayon to rayon form under the influence of a number of factors, cause a high degree of out-migration from regions of new development, cause the exodus of manpower and give rise to large national economic losses.

The need to improve the territorial planning of the living standard also stems from the fact that nationwide measures to improve material well-being are always realized in certain socioeconomic conditions characteristic of a given territory and have different social consequences in connection with regional differences in the level of economic development, in the size of the population's incomes, in the distribution of families according to financial status, etc.

At the same time, methodological questions associated with the improvement of social planning are being resolved slowly.

Almost four years have elapsed since the decision was made to include consolidated sections for the entire complex of measures in the area of social development in state plans for economic and social development. However the structure of this section, its indicators and the methods used to develop them have by no means been fully articulated. The debate on the number of indicators for the union level, for the level of union and autonomous republics, krays and oblasts, ministries and enterprises has been protracted.

The draft of the system of indicators elaborated by the Scientific Research Economics Institute under USSR Gosplan as a part of the State Plan for the Economic and Social Development of the USSR includes approximately 600 indicators grouped as follows: the cultural and socioeconomic composition of the population; development of ownership relations; character and content of labor and working conditions in social production; resource supply for programs for social development and for raising the people's living standard; the population's incomes; the population's consumption of material goods and services; the social infrastructure (education, culture and art, medical care, recreation, physical culture and sport; housing, municipal services and amenities; personal services; transport and communication services; trade and public catering services); the population's time budget; environmental protection. They are all necessary indicators but there are too many of them. Many of them duplicate other sections of the plan or are of a reference nature. We deem it essential that indicators

of the consolidated section of the plan carry information not only about the projected and actual result (state) of social development but also about conditions for attaining the given result. In other words, social development in all sections of the plan must be interpreted as the process of realizing the planned social result , which includes the conditions to its attainment. At the same time that we reduce the overall number of indicators, we should single out features of them that are common to subsystems and to the entire section as a whole and on this basis strengthen the methodological coordination of the proposed indicators with indicators of the consolidated section of the national economic plan and its administrative-territorial aspect, in particular with regard to quality indicators. In this regard, the identification of such subsystems of indicators as conditions of social development (capital, manpower, performance), the results of social development and of social effectiveness should be considered a promising direction at all levels and in all sections of the plan. The existence of the given subsystems of indicators would make it possible to analyze the dynamics and compare levels of social development of branches of various regions.

Naturally, in the process we must devote a great deal of attention to synoptic (as a rule, value) indicators (the population's real incomes, wages, social consumption funds, volume of consumption of goods and services) and to special indicators that are usually expressed in physical terms (volume of consumption of basic foodstuffs, per capital housing space, number of hospital beds per 10,000 population, number of places in preschool institutions per 100 preschoolers, etc.).

RSFSR Gosplan has devoted much attention to determining the planned wage fund --the basic source of satisfaction of the material needs of the work force--in oblasts, krays and ASSR's. According to the branch principle of management, the wage fund is ratified for enterprises, associations and organizations. Nor could it be otherwise since wages are not only the basic form of compensation of expenditures on the production of labor power, are not only a distribution category but are also one of the basic costs of production and consequently are a production category. The overall wage fund for a given territory must be calculated and planned simultaneously in close coordination with personal consumption funds, with the volume of retail trade and paid services, and with money circulation plans.

The coordination of the wage fund with the enumerated indicators is of particular importance to administrative regions since money incomes are usually spent at the same place they are earned. The calculation of the overall wage fund is based on the study of factors that determine the average wage (wage scale, growth of labor productivity, product mix), changes in the size of the work force and in its distribution according to sphere of activity. Regional wage coefficients are also taken into account in the process.

Social consumption funds, that are characterized by the volume of goods and services provided to the population free of charge or at a reduced rate as well as cash payments (pensions, grants, scholarships, etc.) in

addition to earned income are an important indicator that is incorporated in the integrated plan for raising the people's living standard. In the process of planning the volume of the social consumption fund for oblasts, krays and autonomous republics, it is necessary to take into account funds received from all sources, including funds received from union, republic and local budgets; funds from enterprises, trade unions, collective farms, and social organizations in a given territory.

The calculation of the plan indicator of social consumption funds entails great technical difficulty. This is because the maintenance of institutions providing sociocultural services free of charge is financed by many enterprises and organizations belonging to different ministries and departments of union, republic and local subordination and by numerous other sources (union, republic and local budgets; funds provided by enterprises and cooperative organizations; trade union budgets). The significance of this indicator in the integrated plan for social development and for raising the people's living standard is great because it must reflect the population's money incomes and all current outlays on the maintenance of institutions responsible for public education and culture, health care and social security, physical culture and sport, housing and municipal services. Calculation of these indicators makes it possible to determine the correlation between earned income and income from social consumption funds.

The integrated plan for social development and for raising the people's living standard enables local planning organs to determine the general growth rates and proportions between main sources of the population's real incomes and the use of social consumption funds and basic indicators of development of the network of enterprises and institutions in the service sphere.

The resolution of these questions is naturally directly associated with the growth of the effectiveness of social production, with the rational use of material, labor and financial resources. "The effectiveness of the socialist national economy," Yu. V. Andropov observed in the article "The Teaching of Karl Marx and Certain Problems in Socialist Construction in the USSR," must of course be judged not only on the basis of purely economic criteria but also on the basis of social criteria, with due regard to the end goal of social production... Indeed, no matter how multifaceted the tasks confronting the Soviet economy might be, they ultimately reduce to the single task of promoting the well-being of the working people, of creating material conditions for the further development of their spiritual and cultural life and their social activism."[4]

In the light of the decisions of the November (1982) Plenum of the CPSU Central Committee, planners in the Russian Federation see their task to lie in continuing the effort to improve the management of the economy, to raise the role of autonomous republics, krays and oblasts in resolving problems associated with the further growth of the effectiveness of production and the satisfaction of the population's needs.

FOOTNOTES

1. "Materialy Plenuma Tsentral'nogo Komiteta KPSS, 22 noyabrya 1982 goda" [Materials of the Plenum of the CPSU Central Committee. 22 November 1982], Moscow, Politizdat, 1982, p 9]

2. V. I. Lenin, "Polnoye sobraniye sochineniy" [Complete Collected Works], Vol 6, p 232.

3. See: "Planirovaniye ekonomicheskogo i sotsial'nogo razvitiya v RSFSR" [Planning Economic and Social Development in the RSFSR], Moscow, "Sovetskaya Rossiya," 1982, pp 158-162.

4. Yu. V. Andropov, "Ucheniye Karla Marksa i nekotoryye voprosy sotsialisticheskogo stroitel'stva v SSSR" [The Teaching of Karl Marx and Certain Problems in Socialist Construction in the USSR"], Moscow, Politizdat, 1983, p 12.

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WORKING CAPITAL AS A FACTOR OF REPRODUCTION

Moscow DEN'GI I KREDIT in Russian No 5, May 83 pp 31-36

[Article by Doctor of Economic Sciences N. S. Lisitsian: "Working Capital and Its Role in the Process of Reproduction"]

[Text] The accomplishment of the most important national economic task of increasing the efficiency of social production on the basis of its intensification requires the scientific substantiation of the basic means of improving the economic mechanism in the interconnection of all its units. Along with the general problems, which arise when studying these interconnections, there are also many "autonomous" problems which stem from the peculiarities of one economic category or another, one value tool or another, which are being used or should be used in the overall system of the economic mechanism.

In this article an attempt is made to cover several of the basic directions, which, in our opinion, should be chosen for the improvement of the management of working capital and the financial sources of its formation. Practical experience shows that the many rich possibilities, which have been incorporated in working capital, in the present economic mechanism are being utilized extremely inadequately. To a certain extent this ensues from the theoretical underestimation of working capital as a reproduction category.

Meanwhile working capital is first of all a reproduction category, being an integral part of productive capital.[1] Working capital is the portion of the value of productive capital, which detached itself in time (which was as if reduced to an annual scale, more precisely, to the scale of one reproduction cycle of this capital) and which accomplishes its constant movement on the basis of and at the same time as the movement of the use values which act as its physical basis--the objects of labor and the means of labor. Subject to the place which it occupies at a given moment in the process of its reproduction, the capital invested in it assumes in succession functional forms--productive, commodity and monetary.

One of the important peculiarities of working capital, which distinguishes it from another important part of productive capital--fixed capital--consists in the fact that the movement of its value in its overwhelming portion (except for its monetary form, which has a relatively independent movement), occurs at the same time as, in synchronism with the movement of its physical basis. This peculiarity creates

1. For more detail on this see VOPROSY EKONOMIKI, No 11, 1980.

realistic conditions of the management by means of it and on its basis of the planned movement (turnover) of the entire aggregate value and its physical vehicles, which occurs in the process of expanded socialist reproduction.

The connection between the reproduction of the national product and the reproduction (turnover) of working capital appears especially vividly, if it is taken into account that the control of these two important processes in practice is carried out within the limits of a uniform period--as a rule, a 1-year period.

For the purpose of intensifying the process of the reproduction of the national product and the entire process of expanded socialist reproduction it seems expedient to increase substantially during the current and subsequent five-year plans the role of working capital in the overall system of the economic mechanism. Hence arises the demand for the utmost utilization of the possibilities and peculiarities, which are incorporated in working capital. Such a use of them should, of course, be carried out at the different levels of the national economy in accordingly different, but coordinated organizational forms. In other words, its management should be improved on the macro- and microlevels. First of all this requirement applies to one of the most important national economic tasks--the saving of material resources, on the accomplishment of which, as was noted by General Secretary of the CPSU Central Committee Yu. V. Andropov, both the accomplishment of the tasks of the current five-year plan and the development of our economy in the future depend to a great extent.[2]

At present, in our opinion, an inefficient structure of the stocks of physical assets has formed. The shortcomings in the use of the latter found generalized reflection in the slight slowing of the rate of turnover (the turnover rate) of working capital, primarily due to the capital invested in material stocks (the capital for which standard rates are laid down).

The rate of the turnover of working capital directly depends on the saving of these stocks. This is due to the fact that acceleration is a result of two connected, but at the same time different conditions. First, the more rapid movement of physical assets and the working capital included in them through the stages of the reproduction process; second, the relative decrease of the total amount of this capital, which is mainly achieved by means of the overall saving of the material, as well as the monetary resources which are involved in the process of reproduction. It is natural that when both of these conditions are in effect at the same time, an accordingly greater economic impact and the greater acceleration of the capital are obtained.

The most substantial reserves of the overall economy of physical assets and the working capital invested in them are contained, in our opinion, in the relative decrease of the production stocks: their proportion in the total amount of working capital as present comes to about 30 percent for the national economy and 48 percent for industry.

Taking into account that each percent of the working capital of the national economy is equal to more than 4 billion rubles, it is possible to form the opinion that

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2. KOMMUNIST, No 3, 1983, p 13.

the sound adjustment of the structure of the stocks of physical assets, and thereby of the capital invested in them, affords possibilities of their overall saving and the corresponding acceleration of the turnover.

During the coming period it would be advisable to carry out a gradual change in the distribution of the stocks of production materials ("the potential objects of labor," to use Marx' expression); instead of their preferential dispersal among the immediate consumers, that is, in the sphere of production, as is presently the case, to shift their storage and to concentrate it in the corresponding units of the sphere of circulation--in the systems of material and technical supply, agricultural procurements and so on. Such a shift requires, of course, the improvement of the economic mechanism of the sphere of circulation.

In reality, the process of the concentration of reserve commodity stocks in the sphere of circulation, which is due to the requirements of the intensification and improvement of the work of individual sectors, has already begun. In agriculture this is connected with the need for the better keeping capacity of the products of this sector for the purpose of the successful fulfillment of the Food Program; in material and technical supply--primarily for the purpose of the saving of manpower and material resources and the better shifting of them. In turn the accomplishment of this task required the elimination of departmental isolation in this unit. In trade in consumer items the need for the greater concentration of these goods in the wholesale units to a considerable extent is dictated by the requirements of the broadening of the possibilities of shifting stocks, and thereby their decrease on the condition of the better meeting of the demand of the population.

Our proposal boils down to the fact that the indicated measures, which have been brought into being by objective reasons, should be reduced organizationally to the comprehensive planned management of the entire process of commodity circulation, for this process is, in essence, a unified economic process, with unified ultimate tasks and practical goals (what is meant, for example, is the creation of the technical base--warehouse facilities and various devices, the expansion of transportation and so on).

The objective possibility of the proposed change of the structure of the aggregate production and reserve commodity stocks stems from the fact that with respect to the consumer properties the physical basis of the two indicated forms of material stocks remains unchanged regardless of the change of their location in the reproduction process. Thus, a given type size of metal is the same with respect to its consumer properties (on the condition of their preservation) both at the warehouse of finished items of the metallurgical plant which produced it and on the entire route through the commodity-producing units and at the warehouse of production materials of the machine building plant which purchased it.

It is valid, of course, to implement measures on the gradual concentration of reserve commodity stocks in the sphere of circulation along with the development of the system of direct economic ties between producers and consumers, with the improvement of the work of transportation and marketing and supply organizations, with the saving of materials within enterprises, with the skillful use of such indicators as the decrease of the materials-output ratio of the items being produced and so on.

Particular attention should be attached to the serious tightening up of contractual discipline on deliveries of goods. For one of the causes of the formation of considerable stocks of them, including production stocks, is connected with the uncertainty of economic organizations about the timely receipt of the necessary materials and goods, that is, with the desire to eliminate the risk of the breach of the contract on deliveries, and thereby the upsetting of the fulfillment of the production program.

The charge for the elimination of such "risk" costs society dearly, since it diverts from the economic turnover a portion of the physical assets and the capital invested in them and slows their movement. Therefore, in our opinion, it is necessary to pursue more consistently and systematically a unified policy (expressing it organizationally in the long-range plans) with respect to the improvement of the distribution of stocks of physical assets for the purpose of their better shifting.

This raises the question of the improvement of those aspects of the economic mechanism, which are connected with the evaluation of the work of enterprises on the fulfillment of the plans of deliveries of products and goods. This question returns us to the examination of the indicator of sales. We share the view of N. V. Caretovskiy that it is necessary to increase the role and importance of the fulfillment of the plan of the sale of products in conformity with the concluded economic contracts.[3]

While agreeing with the arguments advanced by him in favor of this indicator, let us add that it is also connected fundamentally with all the indicators which characterize the activity of marketing and supply, financial and bank organs. Apparently, this indicator should be used extensively in the process of their activity, for example, the mechanism of the return of credit should be connected with it. It is necessary to use the indicator in question more completely in the system of general indicators of the efficiency of social reproduction and, particularly, the sphere of circulation.

It is a question not of the separate use of the depersonalized indicator of sales, but of its economic organizational, specific structure, which is possible on the basis of the concluded contracts on deliveries. Such an indicator will also lend an essentially important direction to the formation of material stocks, to say nothing of the positive influence on the progress of the reproduction process.

The management of material stocks for the purpose of the relative decrease of their total amount for the national economy as a whole on the condition of the assurance of the continuous planned progress of the process of reproduction in many ways depends on the management of working capital. Such a dependence is achieved organizationally by the planning (rate setting) of working capital, particularly its so-called physical portion. The rate setting of working capital is, in reality, one of the important aspects of the planning of the reproduction proportions. Therefore it should be carried out in conjunction with various important aspects of the long-range planning of the development of the national economy, particularly with the planning of fixed capital on the basis of the tasks of scientific and technical progress and the possibilities of decreasing the materials-output ratio and the

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3. DEN'GI I KREDIT, No 12, 1982, p 59.

capital-output ratio, as well as on the basis of the prospect of the development of the production of raw material resources and so on.

At present the requirement of such a comprehensive approach to the rate setting of working capital, in our opinion, is not being completely met. The rate setting of working capital, in essence, is being confined to the level of cost accounting units. While the latter in the process of rate setting are proceeding primarily from the conditions which have been formed at the given moment. This does not make it possible to ensure completely enough the necessary coordination between the standards of this capital, which are being established, and the long-range development of the national economy, its intensification and efficiency.

For the combination of the centralized management of this capital with the independence of cost accounting economic units it seems expedient on the basis of the requirements of the development of the national economy for the 5-year period being planned to establish for ministries and departments the control figures on the standards of working capital (its so-called physical portion) in accordance with its total amount and basic types. These control figures should be reported to the cost accounting units so that the latter on their basis and on the basis of the specific conditions of work would elaborate detailed standards of the stocks of physical assets and the working capital invested in them, and then would submit them to superior economic organs.

It is valid to include the consolidated standards, which were envisaged by the State Planning Committee, in the plan of the development of the national economy for a 5-year period and to approve them along with the basic indicators. It would be possible, apparently, to introduce such a procedure starting with the 12th Five-Year Plan first of all for industry, and then for the other sectors of the national economy.

The simultaneous review (for example, as of January 1984) of all the material stocks of cost accounting enterprises, in our opinion, should precede the establishment of the standards of working capital for the coming five-year plan. This measure is necessary for the purpose of the "clearing" of the surplus and unnecessary physical assets which have accumulated at them and their redistribution along the individual units in order to establish sound standards of the stocks of physical assets and the capital invested in them on the basis of the "cleared" amounts of these stocks and the prospects of the development of the sectors. This and the measures connected with it will serve as a condition of the strengthening of one of the important links of the overall chain of the economic mechanism.

The scientifically sound management of the financial sources of the formation of working capital is of very substantial importance for the increase of the efficiency of its use. As is known, inherent in each of these sources are its own peculiarities, its own economic limits and its own practical forms of use, the observance of which is objectively necessary for the proper functioning of the entire economic mechanism. The structure of the financial sources of working capital is directly connected with such aspects of the reproduction process as money circulation, finance and credit, as well as serves as an important condition of genuine cost accounting, the cost accounting interest in the use and preservation of working capital and these sources themselves.

The difference between working capital and its financial sources frequently is not taken into account. In a number of instances they are identified. This has the result that the management of working capital in practice is carried out as if from the "financial" end, but even in this case the comprehensive approach is violated, departmental interests prevail and frequently the subjective, in essence volitional factor has a strong effect. This, on the one hand, affords the possibility of certain irregularities of its structure (frequently due to departmental interests) and, on the other, creates the possibility of achieving relatively easily the groundless adjustment of the ratio of financial sources.

As a result of the most different causes at present, in our opinion, a not entirely efficient structure of the financial resources of working capital has formed. It is possible to say that the most substantial shortcomings in the management and use of working capital exist in this area. This was caused to a significant extent by factors stemming from the economic mechanism. For example, as a result of the established methodology of determining the profitability, as well as the differences in the rates of the fee for capital and for bank credit against seasonal stocks of physical assets (6 percent and 2 percent) the aspiration appeared among economic units to use the more "inexpensive" source--bank credit.

The effect of the factors connected with the shortcomings in the work of enterprises, particularly the untimeliness and incompleteness of deliveries, shows. As a result not only individual associations and enterprises, but even some sectors of industry of group B lack in significant amounts the necessary amounts of internal working capital, and their activity is being carried out for the most part at the expense of bank credit.

The standards of internal capital (which are called upon to be the basic financial source of the formation of the standards of stocks of physical assets) at a number of enterprises are so low, that in practice they are of only a symbolic nature and cannot serve as the cost accounting stimulus, by means of which it is possible to influence effectively the efficient use, the preservation and the rate of turnover of working capital and to step up the credit influence on the economy.

In recent years in the total amount of financial sources of the formation of working capital the proportion of internal capital has decreased significantly with the corresponding increase of the proportion of bank credit and other sources (see the table on the following page).[4]

Whereas in 1966 the ratio of internal capital and bank credit in the formation of the working capital, for which standard rates are laid down, of the group of ministries in question was equal (about 39 percent in the total amount of its financial sources), by 1981 it had changed significantly due to the substantial decrease of the proportion of internal capital (to 21.4 percent), which came to about half of the proportion of bank credit--43.1 percent.

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4. In connection with the fact that in the published report of the Central Statistical Administration some financial sources of the formation of working capital are reflected in generalized form, we broke them down with respect to 17 industrial ministries, the total amount of the working capital of which comes to more than half of the working capital of the national economy.

Structure of the Financial Sources of the Formation of Working Capital for 17 Industrial Ministries During 1965-1980
(percent of total financial sources)

(1) На начало года	(2) Средства, авансированные государством на образование оборотных средств					(11) Прочие финансовые источники образования оборотных средств		
	(3) всего	(4) из них				(3) всего	(12) из них средства	
		(5) нормируемых			(9) ненормируемых		(13) кредиторов	(14) специальные и прочие
		(6) собственные средства		(8) кредит банка*	(10) кредит банка			
		(3) всего	в том числе приравненные (7)					
1966	90,3	38,9	2,3	38,9	12,5	9,7	7,5	2,2
1970	85,1	32,4	3,0	42,7	10,0	14,9	8,0	6,9
1975	84,2	28,4	3,8	43,6	12,2	15,8	7,8	8,0
1980	83,4	22,0	3,7	42,6	18,8	16,6	8,5	8,1
1981	83,7	21,4	3,9	43,1	19,2	16,3	8,3	8,0

Key:

1. At beginning of the year
2. Capital advanced by the state for the formation of working capital
3. Total
4. Of it
5. For which standard rates are laid down
6. Internal capital
7. Including that equated with interna. capital
8. Bank credit*
9. For which standard rates are not laid down
10. Bank credit
11. Other financial sources of the formation of working capital
12. Of them the capital of
13. Creditors
14. Special funds and others

*Including turnover credit.

At the same time the temporarily idle assets of the stimulation funds also had an influence on the decrease of the amount of these two planned sources, which was a direct result of the change of the economic mechanism, which was carried out in the middle of the 1960's.

When examining the cited structure of the financial sources of working capital it should be taken into account that a portion of the internal capital is actually formed not by means of this capital in the direct sense of this term, but by means of the so-called fixed liabilities, which are equated with internal working capital. Moreover, the value mechanism of the formation of the latter leads to the groundless involvement of short-term credit in the economic turnover of individual enterprises (associations). As a result of the fact that the actual amount of these fixed liabilities frequently (especially within the year) is less than their planned amount, bank credit proved to be the real financial source of the backing of the corresponding portion of the internal capital. In connection with what has been said the task is arising for such an improvement of this section of the economic mechanism, which could ensure consistent and strict implementation of the prevailing principles of the organization of working capital in practice.

It seems that for this purpose with reference to the financial sources of working capital it would be valid to begin and to pursue consistently a policy of the regulation of their organization and planning. Such regulation should, in our opinion, be carried out simultaneously in two interconnected directions.

First, to gradually adjust the formed structure of the financial sources of the formation of working capital by the relative increase of internal working capital in conformity with its standards, particularly the stocks of physical assets.

Second, to gradually expand the application of the principle of the combination of the proportionate involvement of internal capital and bank credit (as sources of the formation of the capital) in the stocks of physical assets, for which standard rates are laid down (the extension of credit on the turnover). Let us examine each of these directions.

Let us begin with the first one. Inasmuch as during the next few years, apparently, the necessary assets for making up the entire shortage of internal working capital, which at present has formed for a significant portion of the enterprises (associations) and several sectors, will not be able to be allocated from the accumulations of economic organs, as well as the budget, for a certain time bank credit may remain the source of the filling of this gap. However, it is expedient to grant the corresponding amount of this credit in economically quite specific forms and in accordance with a specific procedure, which would differ clearly from the procedure of the extension of short-term credit for the current activity of economic organs.

At the same time it is necessary (and this is very important) to establish the specific sources and periods of the repayment of this credit. Thus, if the shortage of working capital and accordingly the need for credit arose for reasons which depend on the operation of the given economic organ or sector, the future internal resources should be the source of repayment, while if it arose for various objective reasons, it would be legitimate, apparently, to seek the source of the repayment of this credit in the procedure of the use of the financial interrelations with the budget: either by direct special allocations to the given sector or by the decrease of the planned financial payments.

The latter of the above-named directions of the improvement of the financial sources of the working capital, for which standard rates are laid down--the broadening of the sphere of application of the principle of the proportionate involvement of internal capital and bank credit (turnover credit)--is also directly connected with the accomplishment of this task. However, the practical implementation of this principle in the future should be organized, in our opinion, on a different basis as compared with the prevailing one: it is valid to grant turnover credit only for the payment for physical assets, so that it would serve its immediate goal as a flexible financial component of the formation of capital in the stocks of these assets and in the backing of the payment turnover.

It seems inadvisable to continue to use this credit for the payment of wages (the credit for their payment if necessary can be granted in a different form) and the payment of the turnover tax.

The use of such internal financial sources as the temporarily idle material stimulation funds also requires improvement. It is economically more valid, in our opinion, to commit these assets to the centralized financial turnover not through the budget mechanism (by their inclusion in the fixed liabilities, which are equated with internal capital), but through the credit mechanism, which is called upon to accomplish the accumulation and use of temporarily idle monetary assets in the national economy.[5]

In one article it is impossible, of course, to settle all the complicated questions of the increase of the role of working capital and the financial sources of its formation in the economic mechanism. These questions require extensive joint discussion with the participation of scientists and experienced workers.

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5. The credit mechanism can be used for this purpose in two forms: either in the form of the deposit of the temporarily idle assets of the stimulation funds (in other words, by means of bank liabilities) or by the "reckoning" of these assets when extending credit to economic organizations.

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PRICES, DECREASE OF MATERIALS-OUTPUT RATIO IN MACHINEBUILDGING

Moscow MATERIAL'NO-TEKHNICHESKOYE SNABZHENIYE in Russian No 4, Apr 83 pp 27-29

[Article by L. Rozenova, chief of the Department of Economic Standards of the USSR State Committee for Prices (Moscow): "The Price and the Decrease of the Materials-Output Ratio"]

[Text] In recent years the work on the increase of the technical level and quality of products and the decrease of their materials-output ratio has been stepped up in the sectors of machine building. The proportion of products with the State Seal of Quality has increased. Many machines, equipment and instruments are enjoying an increased demand abroad.

At the same time machines and devices, which are inferior with respect to the specific metal content to the best domestic and foreign models, are still being produced. Moreover, pricing practice has shown that in a number of instances the metal content of the equipment being newly assimilated does not meet present requirements. This attests to the inadequate attention of planning and design organizations to the development of highly efficient machines and equipment of the highest quality category with the least expenditures.

It is possible to group the following with the basic reasons for the unsatisfactory designing of new equipment. The machine building ministries are studying inadequately the questions of the standardization of the use of materials. At present 500 different unstandardized standard technical documents and estimated norms of the strength and use of metals are in effect in machine building. This does not make it possible to determine the efficient use of metal with allowance made for the achieved quality in ferrous metallurgy and leads to its excessive consumption.

Thus, it was established by the expert appraisal of the economic soundness of the wholesale prices for an ammonia synthesis column for a unitized technological line of ammonia production that the metal content of the column is 27 percent (136 tons) greater as compared with foreign models due to the use for the production of its body of steels with relatively low strength and operating characteristics.

Substantial shortcomings still remain when drafting standard technical specifications. Indicators of the specific metal content per unit of the technical parameter are not included in the specifications of many groups of machines and equipment. And this does not make it possible to carry out the monitoring of the metal

content of items during their designing. The utilization ratio of metal (material), which is used in planning, rate setting and pricing, does not completely characterize the effective use of resources, since it determines only their actual use in case of a given design.

For example, the expert appraisal of the economic soundness of the wholesale prices for agricultural equipment established that the utilization ratio of metal when producing sowing machines at the Krasnaya Zvezda Agricultural Machine Building Plant is within the range of 0.77-0.78, that is, is close to the average sectorial level. However, their specific materials-output ratio is 10 percent greater than foreign analogues with less reliability.

The elaboration of the specific materials-output ratio is being carried out for many groups of machines. The analysis of the materials of the substantiation of wholesale prices shows that in a number of instances the calculation of the metal content of domestic items has been artificially understated as compared with foreign items. When calculating the metal content of machines the expenditure of metal on the production of equipment is taken into account and the metal, which is expended on the production of the obligatory set of spare parts, which is delivered with the equipment, is groundlessly not taken into account.

Thus, in the specifications and production flow chart of the technical level and quality for the GTsN-195M pump, the production of which was begun in 1982 by the Sumy Machine Building Production Association imeni M. V. Frunze, a mass of 92 tons is envisaged. Along with this pump a set of spare parts, which ensure its operation during the warranty service life, and a set of installation pieces with a total weight of 4.3 tons are delivered. However, these 4.3 tons are not taken into account in the calculation of the specific materials-output ratio of the pump.

The groundlessly understated weight of the pump distorts the estimate of its materials-output ratio and leads to the double accounting of the indicators: a lower weight indicator--the mass of the item without the spare parts--is used for the evaluation of the technical level and quality, a higher weight indicator--the mass with the spare parts--is used when substantiating the wholesale prices.

In our opinion, the real consumption of metal, which is used for the production of both the machine and the obligatory set of spare parts for it, should be specified when calculating the specific metal content of machines and devices. It should be noted that for the groups of products, in which the specific metal content is reflected in the standards and specifications, this indicator has not become standardized and mandatory for planning and design organizations when developing items and for manufacturing plants when producing the products. Scientific research institutes, design bureaus and manufacturing enterprises change this indicator at their own discretion.

The specific materials-output ratio per unit of power, lifting capacity or other parameter is the most thorough indicator, which characterizes the degree of economy of the design. A standardized nature should be lent to this indicator and it should be regarded as one of the basic parameters which are liable to mandatory inclusion in the standard technical specifications.

So far the proper order has not been established in the rate setting of resources. This is leading to the multiplicity of norms and the nonfulfillment of the plan assignments of their decrease. The planning of the rates of consumption of a limited number of types of metal and the establishment of assignments of the increase of the utilization ratio of rolled ferrous metal products alone are enabling the manufacturing enterprises to accomplish a saving of some metals by the increase of the consumption of other materials, that is, to report on the saving of resources with figures which do not have a real physical saving of metal.

For example, a saving of the consumption of hot-rolled metal on the PLP-6-35 plow by 41 percent since the start of series production was shown in the annual report of the Altaysel'mash Plant for 1980. Here the weight of the plow remained unchanged. This attests to the stability of the materials being consumed for the production of plows. However, the product cost increased.

It should also be noted that the actual weight of the finished product of machine building can deviate from the weight envisaged in the standard technical specifications within the range of ±3 percent. The check of a number of machine building enterprises showed that these deviations are aimed at the overstatement of the weight. The actual weight of the T-70S tractor, which is produced by the Kishinev Tractor Plant, for example, deviates from its mass in accordance with the specifications by 3.5 percent. In this connection it is expedient in the standard technical specifications to make more rigid the demands on the deviations of the mass of products.

The planning of the expenditures on new equipment by the stages of its designing and the development of new highly efficient machines with the least expenditures and a low materials-output ratio requires the change of the principles of the formation of limit prices. The USSR State Committee for Prices has approved a new method of determining the wholesale prices and the standards of the net output for machines, equipment and instruments. Limit prices based on the planning expenditures and standard profit are envisaged in it. The check of the soundness of these prices should be made with allowance made for the assurance of the decrease of their level per unit of the final effective impact.

Such a method of calculating the limit prices not only will ensure the continuity of the determination of the wholesale prices and the monitoring of the level of expenditures by stages of the development of new equipment, but will also make it possible already during its designing to establish the economic efficiency and the possible incentive markups for the stimulation of the developers of this equipment.

Additional measures of the decrease of the product cost are also envisaged in the new method. A procedure, which stipulates that in case of a decrease of the materials-output and labor-output ratios as compared with a similar, previously produced product the entire difference in the production cost (the saving) is taken into account in the price of the new product as an additional profit of the manufacturing enterprise, was introduced starting this year. An incentive markup, the amount of which is increased by 1.5-fold, is established for products which correspond to or exceed the world level, that is, the markup can amount to up to two standards of the profitability, which have been established for the corresponding group of products.

The improvement of the designs of machines and equipment should become a basic direction of the assurance of the fulfillment of the assignments on the decrease of the rates of consumption of rolled ferrous metal products. In 1985 it is envisaged to decrease the rates of consumption of rolled ferrous metal products on the average by 18-20 percent, and more than half of this decrease should be provided by the improvement of the designs of machines and equipment. The other factors, which ensure the fulfillment of the assignments on the saving of rolled metal products, are connected with the improvement of the technology, the enlargement of the scale of production and the use of advanced materials, particularly rolled products of improved quality and economical shapes, plastics and other structural substitutes.

It should be noted that the establishment in the new price lists of the ratio of the prices for interchangeable types of products stimulates the production and consumption of more efficient and less critical types of raw materials, fuel, materials and items. Thus, the lower level of the prices for sheet as compared with rolled sections is making it possible to expand the use in machine building of advanced and economical technology. The optimum ratio of the prices of commercial and high quality rolled products, carbon and low-alloy steel has been established. The wholesale prices for plastics have been reduced.

In machine building the bulk of the blanks for parts of machines are produced in foundries and forge and press shops. The saving of metal at these stages and the decrease of scrap mean the decrease of the consumption of scrap metal, pig iron and ferroalloys in case of the production of castings and, in the production of forge and press pieces, the decrease of the consumption of rolled metal products. Wholesale price surcharges for the accuracy rating and the thinness of walls (from 10 to 45 percent subject to the group of complexity of the castings) have been established for the stimulation of castings of increased precision. For the purpose of decreasing the weight of blanks when filling orders it is envisaged that the wholesale price remains unchanged. At the same time penalty discounts of up to 25 percent of the wholesale prices for increasing the mass of blanks as compared with the theoretical mass (according to the drawing) are envisaged in the list of wholesale prices for castings, forged pieces and hot stampings.

Machine building is one of the materials-consuming sectors of the national economy. The proportion of the material expenditures in the cost of machine building products comes on the average to 70 percent and for a number of groups of items considerably more. Here the proportion of the material expenditures has considerable fluctuations even within the limits of similar products. Thus, in the production cost of machine tools the material expenditures range from 30 to 80 percent.

In order to eliminate the interest of enterprises in the uneconomical replacement of materials and the use of expensive sets of equipment with excessive technical and economic parameters, which are not usable in a machine of this design, in the new price lists the profit in the wholesale prices for the products of machine building was calculated according to the standard of profitability, which was established as a percentage of the production cost less the material expenditures. In case of such a method the increase of the proportion of "extraneous" labor does not have an influence on the increase of the profit. At the same time the saving of material expenditures makes it possible to produce above-plan output and by means of this to obtain additional deductions for the economic stimulation funds.

The adopted procedure of determining the profit in the wholesale price of specific items--as the ratio of the profit to the production cost less the cost of the used raw materials, materials, fuel, power, semimanufactures and components--ensures the interest of enterprises in the output of complex labor-consuming, but also more efficient equipment, as well as spare parts, that is, products with a relatively low materials-output ratio. Moreover, these standards are diffierentiated by groups of products for the stimulation of progressive structural changes.

The analysis of the new wholesale prices showed that the profit per ruble of wages with respect to spare parts for hoisting and transporting equipment is 1.5-fold greater than with respect to basic equipment, spare parts for crushing and grinding equipment--1.9-fold, spare parts for mining equipment--2.6-fold and spare parts for metallurgical equipment--1.7-fold. The ratios with respect to other groups of products are also similar.

All the sectors of machine building have been changed over to the use in planning of the standard net output. With respect to this indicator the production of spare parts is also more profitable than the production of the corresponding equipment. The new indicator will promote the decrease of the materials-output ratio and the use of inexpensive materials and substitutes and commercial scrap, since the economic stimulation of enterprises does not depend on the gross output and the amount of used materials, semimanufactures and components. Moreover, if the wholesale price for finished products of equal quality, which are produced from full-value raw materials or with the use of waste products, is approved at one level, the standard of the net output for items made from waste products, as a rule, is higher. This is connected with the fact that when using waste products the materials-output ratio can increase in connection with the need for their additional processing, the irregularity of the blank and some change of the rates of consumption.

At the November (1982) CPSU Central Committee Plenum General Secretary of the CPSU Central Committee Comrade Yu. V. Andropov noted: "Now the economy and assiduous treatment of national property are a matter of the practicability of our plans." Along with other measures, the increase of the role of prices in the stimulation of the decrease of the materials-output ratio is aimed at the utmost economy of resources and the further increase of production efficiency.

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FIXED PAYMENTS, PROFITABILITY IN ECONOMIC MECHANISM

Kiev EKONOMIKA SOVETSKOY UKRAINY in Russian No 3, Mar 83 pp 64-69

[Article by Candidate of Economic Sciences Docent R. Berezyuk and V. Galitskiy (Ternopol): "Fixed (Rent) Payments in the Socialist Economic Mechanism"]

[Text] Such a change of the criteria of the evaluation of the activity of enterprises, which would ensure the reflection of the actual contribution of labor collectives to the meeting of social needs, is one of the most important directions of the improvement of the economic mechanism, which are envisaged by the decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979. The practical implementation of this principle of the rearrangement of the economic mechanism is fully possible only on the basis of the further improvement of the mechanism of the regulation of the fluctuations of the intrasectorial profitability.

The differentiation of the conditions of production in sectors is very significant, to which, for example, the data of Table 1, which were compiled in accordance with the consolidated reporting data of the Ukrobuv'prom Ukrainian Industrial Footwear Association for 1978, attest. A similar situation is also characteristic of other sectors of industry.

Table 1

Differentiation of Enterprises of the Ukrainian SSR Footwear Industry According to the Conditions and Results of Production

	Average value of indicator	Highest value of indicator	Minimum value of indicator
Capital-labor ratio (rubles per worker during largest shift). . . .	3382	7717	1534
Electric power-worker ratio (kWh per man-hour)	0.540	1.084	0.286
Equipment shift coefficient	1.69	2.0	1.0
Output-capital ratio (rubles) . . .	6.19	12.66	3.10
Profitability (percent of productive capital)	49.20	124.20	11.54

The situation does not change, even if the set of objects being analyzed is limited to the largest enterprises. Thus, the ratio of the extreme levels of the average annual output of steel per worker for the nine largest metallurgical enterprises of the country comes to 1 : 3.1.[1] The variety of indicators gives rise to substantial difficulties in the planning, evaluation and stimulation of the activity of similar enterprises and in the regulation of the cost accounting profitability. Let us note that the level of the profitability in the cement sector alone (without unprofitable enterprises) fluctuates within the range of 1 : 30.[2]

Fixed (rent) payments have been used since 1966 for the regulation of the intrasectorial profitability and the weakening of the influence on the results of management of the factors which do not depend on the activity of production collectives. However, so far they have not received extensive dissemination. Moreover, their proportion in the revenues of the state budget has steadily decreased. This does not at all mean that the objective prerequisites, which cause the need for economic levers of the regulation of the intrasectorial profitability, have begun to disappear. The use of fixed (rent) payments was checked by the fact that in the economic mechanism, which was in effect, the procedure of determining the immediate payers had not yet been adequately set up. There was practically no possibility to establish, to what extent the extra profit is a result of the economic activity of the production collective and to what extent it was obtained because the enterprise had been placed by society under more advantageous conditions of management. Therefore, difficulties arose for the organs of the USSR Ministry of Finance in the determination of the group of mandatory payers and the amounts of the fixed (rent) payments. The limitation of the sphere of use of the payments was also due to the fact that in a number of sectors of the extractive industry a decrease of the profitability had occurred over a number of preceding years. For example, in the petroleum industry in connection with the change of the regions of production such a decrease of it was observed that in 1979 the need arose for the temporary halt of the collective of rent payments.

The inadequate development of fixed payments in light industry stems from the fact that the turnover tax is being used extensively for the withdrawal of the net income which is obtained by the enterprises for reasons which do not depend on their activity. However, the turnover tax, in accordance with its economic purpose, is called upon to accomplish the redistribution of the net income, primarily between sectors. If it is used for the regulation of the intrasectorial profitability, this not only decreases the amount of the fixed payments, but is also responsible for the movement of the extra profit through channels which are at variance with its economic nature. In such a case the stimulating role of fixed payments declines and, consequently, the possibility of their more extensive dissemination is hindered.

The increase of the role and the broadening of the sphere of use of fixed (rent) payments are envisaged by the decree of the CPSU Central Committee and the USSR

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1. See EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA, No 12, 1979, p 40.

2. See M. V. Kovina, V. I. Maydanchik, "Vnutriotraslevoy analiz effektivnosti raboty predpriyatiy i ob"yedineniy" [The Intrasectorial Analysis of the Efficiency of the Work of Enterprises and Associations], Moscow, 1977, p 25.

Council of Ministers of 12 July 1979. This is due to the fact that the intrasectorial fluctuations of the profitability are intensifying in the sectors of the processing industry. For example, in machine building the comparatively fast rate of decrease of the production cost of products with their assimilation and the corresponding increase of the extra profit will no longer be able to be taken into account by means of the prices, since the wholesale prices are fixed during the entire 5-year period. Owing to this the fixed payments are becoming objectively necessary. The sphere of use of fixed (rent) payments is also being broadened in the sectors of the extractive industry, since the revision of the wholesale prices for their products will provide a significant increase of the profitability and, consequently, will increase the urgency of the problem of its intrasectorial regulation.

But the broadening of the sphere of use of fixed (rent) payments will require the improvement of the method of their calculation, since the prevailing means of calculation and withdrawal have a large number of shortcomings. First, the establishment of fixed payments in constant amounts or as a percentage of the profit does not stimulate the enterprises, which have comparatively favorable conditions of management, to use the available resources completely. Second, in the extractive sectors of industry, where the rent payments are calculated on the basis of the extracted and sold products, there are no stimuli of the complete and efficient use of mineral resources. The need for the complete, efficient use of the production potential was stressed at the 26th CPSU Congress. This pertains to all types of resources, including petroleum. At present the petroleum recovery ratio on the average for the country fluctuates within the range of 30-50 percent, although given the present production technology this percentage can be increased to 90.[3] Third, the understated standards of the payments or their complete absence cause the completely groundless overstatement of the estimated profitability, as a result of which with respect to many enterprises and even entire sectors the principle of labor equivalence is being violated.

In order to increase in the new economic mechanism the efficiency of the use of fixed payments, the procedure of their calculation should be changed. The amounts of the payments should be established not on the basis of the results of production, for example, the profit, but subject to the objective conditions of the production and sale of products.

In economic literature the question of the need for such a changeover was raised backed in the 1960's, but has now acquired particular urgency.[4] This is in keeping with the general nature of the rearrangement of the economic mechanism during the years of the 11th Five-Year Plan. Thus, the need to increase the scientific level

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3. See N. K. Baybakov, "A Task of National Economic Importance," NEFTYANOYE KHOZYAYSTVO, No 7, 1974, pp 5-6.

4. See S. G. Strumilin, "On the Price of the 'Free Good Things' of Nature," VOPROSY EKONOMIKI, No 3, 1968; T. S. Khachaturov, "On the Economic Evaluation of Natural Resources," VOPROSY EKONOMIKI, No 1, 1969; D. A. Allakhverdyan, "Finansovo-kreditnyy mekhanizm razvitogo sotsializma" [The Financial and Credit Mechanism of Mature Socialism], Moscow, "Finansy", 1976, pp 205-206; A. Bozhedomov, "Fixed Rent Payments in the Petroleum Industry," VOPROSY EKONOMIKI, No 1, 1980.

of planning was responsible for the taking of a number of steps on the increase of the strenuousness of the plan assignments. The plan, which not only ensures the fulfillment of the set assignments, but is also oriented toward the efficient use at the standard level of material, manpower and financial resources, is considered strenuous. In other words, the accurate consideration of all the aspects, which characterize the specific conditions of the application of labor at an enterprise, is becoming quite necessary. The improvement of the system of material stimulation is also being carried out in this direction. For under the conditions when the system of stimulation is made dependent on the end results of the cost accounting activity of production collectives, it is hardly advisable to evaluate the work of the enterprise according to the achieved indicator of the profit without regard for the factors which do and do not depend on the collectives.

It should be emphasized that in the process of rearranging the economic mechanism not only does the need to change over to a new procedure of calculating the fixed payments increase, but the possibility of changing over is also made easier. For the difficulty of determining the payments on the basis of the consideration of the objectively formed differences of the technical equipment of enterprises, natural conditions, the distances of deliveries of finished products, raw materials, materials and so on was posed against it as a decisive argument.

For example, the creation of a unified system of technical and economic norms and standards, owing to which it will be possible, with a sufficient level of accuracy, to give a quantitative appraisal of the objective conditions of management at the enterprise as compared to the indicators achieved by the sector as a whole, is envisaged. Organizationally the changeover has been facilitated by the measures being implemented on the certification of production associations and enterprises. The data necessary for the calculation of the fixed payments can be listed in the passport, in addition to the information on the availability and use of the production capacities, the organizational and technical level, the specialization of production and so forth. In order to substantiate the calculation of the proportion of the fixed payments from the extra profit, to which the effect of each factor gave rise, the nature and degree of their influence on the level of the profitability of production should be established.

In the processing industry the intrasectorial variations of the profitability are due, to a significant extent, to the effect of the factor of the technical equipment of production. It should be borne in mind that the effect of the measures of the retooling of production on the indicator of the profitability cannot be determined unequivocally. It is mediated by a number of circumstances of the organization of production, labor and so forth, as a result of which not only the decrease of the production cost, but also the maintenance without changes for a certain time of the production cost of an item and even its temporary increase, until the complete assimilation of the production capacities being newly put into operation, are possible. In case of an unchanged level of the wholesale price the production cost proves to be the only variable of the level of the profitability of items.

Whereas the absolute amount of expenditures per unit of output is not able to reflect any effect and the direct effect of the factor of the technical equipment of production, the indicator of the structure of expenditures meets these requirements. The increase in the production cost of the proportion of the expenditures of embodied labor and the corresponding decrease of the proportion of the expenditures

of living labor are a direct consequence of the increase of the technical equipment of production. One of the specific forms of the effect of the economic law of the steady increase of labor productivity is manifested in this way.

The method of determining that portion of the extra profit, which is due to the effect of the factor of the technical equipment of production, is also based on the consideration of the changes in the structure of the production cost. First of all it is necessary to modify the formula of the profitability of the production of a unit of output so that with the retention of all its qualitative and quantitative parameters it would be able to reflect the changes of the structure of the production cost. For this let us represent the indicator of the production cost in the denominator of the formula as the sum of the expenditures of embodied and living labor. Such a modification at present does not cause practical difficulties. The expenditures of living labor in the production cost of a unit of items (V) can be defined as the wages of the industrial personnel engaged directly in production with the deductions for social insurance. The method of calculating this amount is envisaged by the instructions which were drawn up in conformity with the decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979.[5]

The expenditures of embodied labor (C) are equal to the difference of the production cost and the amount of the expenditures of living labor.[6] The formula of the profitability (P') of a unit of an item, in this case, assumes the form:

$$P' = \frac{P}{C+V} \times 100,$$

where P is the profit obtained from the production of a specific type of items.

It is advisable, in our opinion, to take the production cost of a unit of items not according to its full amount, but to confine ourselves to the production cost price. The point is that the fluctuations of the amount of the extraproduction expenditures, which reflect the changes in the conditions of circulation, can distort the results of the effect of the retooling of production on the ratio of the expenditures of embodied and living labor in the production cost of a unit of output.

If the numerator and denominator of the obtained formula are divided by the same value, which is equal to V, it will have the following form:

$$P' = \frac{\frac{P}{V}}{\frac{C}{V}+1} \times 100,$$

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5. "Sovershenstvovaniye khozyaystvennogo mekhanizma. Sbornik dokumentov" [The Improvement of the Economic Mechanism. A Collection of Documents], Moscow, Izdatel'stvo "Pravda", 1980, pp 70-71.

6. In the new economic mechanism when calculating the profitability of a unit of output it is envisaged to take into account the production cost of an item without the direct material expenditures, therefore their amount is not included in the proportion of the expenditures of embodied labor of the production cost of the item.

where the indicator of the structure of embodied and living labor in the production cost of a unit of output appears as one of the variables. As a result of the increase of the level of the technical equipment of production the expenditures of embodied and living labor increase. Consequently in the ratio P/V of the formula of the profitability a smaller amount of the surplus product should correspond to the decreased value of V. However, this change is not recorded on the surface of phenomena. It is impossible to take it into account either on the basis of the calculations of the profitability according to the conventional formula or on the basis of the one proposed by us. The whole point is that the changes of the wholesale price lag. Therefore in the value of P a certain proportion of the profit acquires the nature of an extra profit, which is due to the factor of the increase of the level of the technical equipment of production. It is possible to take it into account only if in the ratio P/V of the formula proposed by us the expenditures of living labor are taken according to a hypothetical value. This value is calculated on the basis of the level of the production cost of a unit of output after the introduction of the new equipment, but subject to the structure of the expenditures of embodied and living labor prior to introduction (V_o).

On this basis it is possible to calculate the hypothetical profitability of a specific type of items, in which the effect of the factor of the technical equipment of production is eliminated. The hypothetical profitability of the production of a specific type of items (P'_y) is determined in the following manner:

$$P'_y = \frac{\frac{P}{V_o}}{\frac{C}{V_1} + 1} \times 100 ,$$

where V_1 is the value of the expenditures of living labor in the production cost of a unit of output after the introduction of new equipment.

If the actual profitability includes the results of the effect of all factors, including the changes of the level of the technical equipment of production, while the hypothetical profitability includes the effect of all factors with the exception of the changes of the level of the technical equipment of production, the difference of their values will show the increase of the profitability of the production of a specific type of items, which was due to the effect of only the factor in question.

The calculation of the absolute increase of the profit per unit of output (ΔP), which was due to the increase of the technical equipment of production, is possible on this basis:

$$\Delta P = (P' - P'_y) \times \frac{S}{100} ,$$

where S is the production cost of a unit of the item after the introduction of the new equipment.

As a result of simplifications of the obtained equation, the formula acquires the form:

$$\Delta P = P\left(1 - \frac{V_1}{V_o}\right).$$

By using it, it is possible to determine the extra profit per unit of output, the obtaining of which was due to the increase of the technical level of production. Let us show this using a hypothetical example (see Table 2).

Table 2

Calculation of the Increase of the Profit Per Unit of Output as a Result of the Increase of the Technical Equipment of Production (Rubles)

Indicators	Given a decreasing level of the production cost	Given a constant level of the production cost	Given an increasing level of the production cost
1. Wholesale price of item.	38	38	38
2. Direct material expenditures in the production cost of the item.	8	8	8
3. Production cost of the item less the direct material expenditures before the introduction of the new equipment.	24	24	24
4. Expenditures of embodied labor in the production cost of the item before the introduction of the new equipment.	12	12	12
5. Expenditures of living labor in the production cost of the item before the introduction of the new equipment.	12	12	12
6. Production cost of the item less the direct materials expenditures after the introduction of the new equipment.	18	24	27
7. Expenditures of embodied labor in the production cost of the item after the introduction of the new equipment.	12	16	18
8. Expenditures of living labor in the production cost of the item after the introduction of the new equipment.	6	8	9
9. Expenditures of living labor in the production cost of the item after the introduction of the new equipment, but with allowance made for the structure of the expenditures of embodied and living labor--before introduction (the value of line 6 divided by 2). . . .	9	12	$\frac{27}{2}$
10. The profit per unit of output after the introduction of the new equipment (the value of line 1 - [the value of line 2 + the value of line 6])	12	6	3
11. The increase of the profit per unit of output, which was due to the increase of the technical equipment of production (the value of line 10 X [1 - (the value of line 8 + the value of line 9)])	4	2	1

It should be noted that the invariability of the wholesale price of the output being produced is a mandatory condition of the calculation of the increase of the profit according to the proposed formula. This condition is met, since in the new economic mechanism the wholesale prices remain constant over the entire 5-year period.

The proportion of the profit, which was due to the factor of the technical equipment of production, is becoming the basis of the calculation of one of the structural components of the fixed payments. Here it should be borne in mind that the increase of the technical equipment of production can be accomplished not only by sources which do not depend on the enterprises (centralized capital investments), but also by the collective's own efforts (the production development fund, bank credits), therefore only a portion of the extra profit is to be withdrawn. If it possible to determine it, if the obtained increase of the profit is taken with allowance made for the proportion of the centralized capital investments in the total annual amount.

Along with the factor examined above, the factor of the differences of natural conditions is a factor of the intrasectorial differentiation of the net income. It manifests itself most vividly in the extractive sectors of industry. In order to realize with respect to it the "resource" principle of the calculation of fixed (rent) payments, payments should be collected not per unit of the sold output, but per unit of natural resources. "This will increase the interest of enterprises in the maximum utilization of resources, since otherwise the profitability will inevitably decrease and the product cost will increase."[7]

The commercial reserves of ore, coal, gas and petroleum per hectare of area can be specific indicators of a unit of natural resources. In this respect the experience of collecting rent payments in the timber industry is very useful. According to the Statute on Fixed Payments to the Budget for the enterprise of this sector the rent payments are calculated on the basis of a cubic meter of timber of the estimated felling area, and not on the basis of a cubic meter of felled timber.

However, the commercial reserves of natural resources per hectare of area are not the only factor of the intrasectorial differentiation of their natural productivity. For example, petroleum deposits can differ substantially by "their structure, the area of spread, the thickness and number of levels of the beds, the amounts and saturation of the rock with petroleum, the pressure in the formations, their rate of water encroachment, the specific gravity of the petroleum and so on."[8] In other sectors there are their own specific peculiarities, but all of them, in the end, are reflected in the level of the individual production costs. Therefore it is considered expedient to collect the fixed (rent) payments per ton of the commercial reserves of natural resources, which are in the ground, but with the mandatory consideration of the cost of extraction at each deposit.[9]

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7. D. A. Allakhverdyan, "Finansovo-kreditnyy mekhanizm razvitogo sotsializma," p 206.

8. A. Bozhedomov, "Fixed Rent Payments," VOPROSY EKONOMIKI, No 1, 1980, p 130.

9. Ibid., p 131.

The objectively formed differences in the distribution of production with respect to the sources of raw materials and the consumers of the finished product are another factor of the intrasectorial differentiation of the results of economic activity. In some sectors the influence of this factor is very appreciable.

The determination of the group of enterprises with especially favorable conditions of the deliveries of raw materials, basic materials and purchased semimanufactures and, hence, the payers of the fixed payments is possible on the basis of the comparison of the individual and average sectorial norms of the transportation reserve. The average is an expression of the typicalness of the sectorial norm of the transportation reserve. If the individual norm is less than the average sectorial norm, this attests to the favorability of the conditions of deliveries of the means of production, which the enterprise needs. The average characterizes the entire array of data, a portion of which can deviate substantially from it. Therefore, for the establishment of the quantitative parameters of especially favorable conditions it is necessary to compare the individual norm of the transportation reserve with the average for the sector with allowance made for the standard deviation. If, for example, the average sectorial value of the norm of the transportation reserve comes to 5 days, while the standard deviation comes to 20 percent, the enterprises, which have an individual value of the norm of the transportation reserve of less than 4 days, are grouped with the payers of the fixed payments.

The standards of the payments can be established subject to the degree of deviation of the norm of the transportation reserve from its maximum value--the average sectorial value with allowance made for the standard deviation.

The intrasectorial differences in the distribution of production with respect to consumers affect the end results of the management of the supply enterprises, if they themselves bear the expenses on the delivery of the finished product to the consumer. This occurs when the sale of products is carried out at wholesale prices free at the station of destination (free on rail at the station of destination, free at the warehouse of the consumer). The transportation costs are included in the wholesale price in accordance with an average value, therefore the supply enterprises, for which especially favorable conditions of deliveries have formed, obtain an extra profit which is independent of their activity. It should be withdrawn for the state budget by means of fixed payments. It is possible to establish their standards subject to the degree of deviation of the individual transportation costs (per unit of output) and their average value, which was included in the wholesale price.

The possibility of the further specification of the "resource" principle of the calculation of the fixed (rent) payments is not excluded, of course, if other factors of the intrasectorial differentiation of the objective conditions of the application of labor, which were not examined here, are taken into account. The main thing consists in the fact that the economic content of the category "fixed payments" is fully realized and the possibility of developing a lever of the regulation of the cost accounting profitability, which is equal to the new economic mechanism, is ensured only on the basis of the "resource" approach.

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TURNOVER TAX EXAMINED

Kiev EKONOMIKA SOVETSKOY UKRAINY in Russian No 3, Mar 83 pp 69-72

[Article by Doctor of Economic Sciences M. Alekseyenko (Ternopol): "On the Turnover Tax"]

[Text] In the economic policy of the Communist Party and the Soviet Government the problem of the increase of monetary accumulations and their efficient use in the interests of socialist society has always held a central place. It is especially urgent at the present stage of the building of communism, when the expenditures of the state on the financing of the national economy, sociocultural and other measures are steadily increasing.

During the 10th Five-Year Plan 2 trillion rubles of financial resources were mobilized, which is nearly equal to their total during the preceding 10 years. As a result of the broadening of the scale and the increase of the efficiency of social production the total amount of financial resources increased during the 10th Five-Year Plan (as compared with the 9th Five-Year Plan) by nearly 36 percent. The main source of these resources is the monetary accumulations of the national economy, which appear in two basic forms: the turnover tax and the profit.

The socialist economic system creates favorable conditions for the continuous and rapid increase of monetary accumulations in the USSR national economy. During 1965-1981 they increased from 83.3 billion rubles to 249.7 billion rubles (or by threefold), including the turnover tax from 38.7 billion rubles to 100.4 billion rubles (or by 2.6-fold).[1] This was achieved by means of the increase of the production volumes, the increase of the productivity of national labor, the improvement of product quality and the decrease of the product cost.

In conformity with the decree of the CPSU Central Committee and the USSR Council of Ministers "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality" (1979), during the 11th Five-Year Plan it is envisaged to implement a number of measures on the further improvement of the system of payments to the state budget for the purpose of increasing their influence on the effectiveness of social production.

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1. See "Narodnoye khozyaystvo SSSR. 1922-1982. Yubileynyy statisticheskiy yezhegodnik" [The USSR National Economy. 1922-1982. An Anniversary Statistical Yearbook], Moscow, "Finansy i statistika", 1982, p 549.

The turnover tax is an important economic lever and the most stable source of revenues of the USSR State Budget. It is a proportion of the monetary accumulations, which is firmly fixed in the price of a commodity and is transferred to the centralized fund of financial resources of the country in the process of its sale.

In contrast to the profit of production associations and enterprises, a significant portion of which is used for their own needs, the turnover tax, as a rule, is placed in full directly at the disposal of the state. This is very important for the timely backing with the necessary capital of the measures, which are financed from the state budget and are aimed at the expansion and improvement of production, the increase of the material and cultural levels of the life of the Soviet people, the strengthening of the defensive capability of the country and other goals.

In its economic nature the turnover tax does not differ from the profit. Like the profit, it is a part of the monetary accumulations which are created at socialist enterprises, therefore the state has the opportunity to manage freely when distributing them. With the decrease of the turnover tax rates or its complete abolition for some items or others the profitability of their production increases. If as a result of the decrease of the production cost of the output being produced or an increase of the wholesale prices for it the profit exceeds the optimum amounts, it is possible to convert a portion of it into the turnover tax by means of the increase or the establishment (if these goods were previously not taxed) of its rates.

In the USSR State Budget for 1983 the turnover tax receipts are envisaged in the amount of 104 billion rubles, which comes to 29.4 percent of all the revenues.

The realization of the bulk of the monetary accumulations in the sphere of physical production (particularly in industry) creates the need for the timely withdrawal of a portion of these accumulations for the revenue of the budget in order not to permit the excessively great profitability of production associations and enterprises, which leads to the weakening of cost accounting.

The withdrawal for the revenue of the state budget of a portion of the monetary accumulations in the form of the turnover tax makes it possible to redistribute these accumulations among the enterprises and sectors of industry, within sectors and among the individual economic regions of the country, as well as to regulate the level of the cost accounting profitability of individual items, enterprises, associations and sectors of industry.

Practical experience shows that the need has arisen for the significant increase of the effectiveness of the turnover tax as an important economic lever. In our opinion, it should be linked more closely with the prevailing system of the economic stimulation of production as a stimulant of the mobilization of the internal economic reserves of the increase of the production of output, the increase of its quality and the decrease of the production cost.

Some measures have already been implemented in this direction in recent years. In particular, for the purpose of stimulating the increase of the production of consumer goods enterprises have been granted the right in case of the inadequacy of the assets of the production development fund to allocate up to 50 percent of the turnover tax from the sale of the additionally produced consumer goods for the repayment of the bank credits received for the expansion of their production.

It should be noted that enterprises are using this right inadequately: thus, in 1981 in the Ukraine 15.8 billion rubles in turnover tax were paid to the revenue of the state budget, while only 5.6 million rubles (or 0.03 percent) were used for the repayment of loans of the State Bank, which were obtained for the increase of the production of consumer goods.[2] The use of a portion of the turnover tax for the repayment of bank credit promotes the increase of the interest of enterprises in the increase of the production of consumer goods and, consequently, the monetary accumulations. The socialist state is the owner of the entire net income created at state enterprises, and therefore is also interested in such a distribution of it, which would promote to the utmost the increase of the efficiency of social production. Incidentally, credit is also a centralized source of the financial resources of the state and is used for covering the expenditures on the expansion of the production of consumer goods.

At the 26th CPSU Congress it was stressed that the rapid increase of the production of consumer goods is a task of paramount economic and political importance.

Turnover tax breaks act as an effective economic stimulus of the increase of the production of consumer goods: the complete or partial exemption of individual enterprises and the turnovers on the sale of many types of goods from the payment of the tax. Thus, the newly organized enterprises of state industry of rayon, city, oblast, kray and republic (ASSR) subordination, which produce consumer goods from local raw materials and waste products, are exempt from the payment to the budget of the turnover tax for 2 years after their placement into operation. This privilege also applies to the newly created enterprises of consumer cooperatives and several others.

The temporary exemption from the payment of the tax of the receipts from the sale of these goods is very important for enterprises, since in this case they have the opportunity not only to offset the additional expenditures connected with the assimilation of the production of new items, but also to receive a larger profit, a significant portion of which will be used for the further expansion of production and the material stimulation of the workers.

In our opinion, for the increase of the material interest of the collectives of enterprises in the extensive and efficient use of noncritical local raw materials for the production of consumer goods factories, plants and associations should be granted certain turnover tax breaks also after the lapse of 2 years after their placement into operation. In particular, when approving the turnover tax rates it is expedient to ensure a greater (by approximately 3-5 percent) profitability of the production of these goods as compared with analogous goods which are made from centrally allocated raw materials. The implementation of this proposal would promote the increase of that portion of the profit, which is left at the disposal of the economy and is used for the expansion of the production of consumer goods and the material stimulation of workers.

Practical experience shows that the question of the granting to enterprises of valid reductions on the established turnover tax rates is not being settled in good time in all instances when the production of individual items is unprofitable

2. According to the data of the Ukrainian SSR Ministry of Finance.

or has a low profitability. This has the result that some enterprises strive to remove such items from production or to decrease their output significantly.

The turnover tax as an economic tool can be an important stimulus of the development of production and the increase of its efficiency only on the condition of the establishment of the rates of the tax for individual goods and groups of similar goods in amounts which would ensure the normal profitability of production (15-20 percent). The timely revision of these rates will promote the increase of the production of industrial output--the basis of the increase of the monetary accumulations of the national economy.

At present the production associations and enterprises, at which people with physical handicaps (deaf mutes, the blind) work, are fully or partially exempt from the payment of the turnover tax on the sale of products of their own making. Benefits are granted to some of them only on the condition of the enlistment of full-fledged manpower in an amount which does not exceed the norms set by the legislation of the corresponding union republic. These measures are stimulating the attraction to the sphere of physical production of workers who have physical handicaps, which is important under the present conditions of the shortage in the national economy of our country of manpower resources.

It is also necessary to elaborate additional measures on the more complete enlistment of retirees in labor in various spheres of social production. Since the labor of retirees, as a rule, is less productive than the labor of people of able-bodied age, it is expedient to grant certain benefits to the associations and enterprises which use their labor on large scales. Thus, if the turnover tax is imposed on the output being produced, in our opinion, it is necessary to decrease its rates subject to the proportion of the working retirees in the total number of workers of the association, factory, plant. As a result the profit will increase and the turnover tax will accordingly decrease.

The optimum combination of the personal interests of retirees (the granting to them of a number of privileges in accordance with prevailing legislation) with the interests of the associations and enterprises, at which they work, will promote the increase of the production of industrial output, the increase of monetary accumulations and the more complete meeting of the needs of the Soviet people.

It should be noted that in all the European countries of the socialist community the turnover tax is a most important source of the revenues of their budgets. The processes, which are occurring in the economy of these countries in connection with the improvement of planning, the system of stimulation and management, are also having an influence on the principles of the collection of the turnover tax. The tendency to change the turnover tax from a purely fiscal payment into a tool of the stimulation of the development of production has been noted at this time.

The practical experience of using the turnover tax in Hungary merits attention. The rates of this payment increase when it is necessary to limit or halt the production of obsolete products. The advantage of the use of higher rates of the turnover tax on obsolete products consists in the fact that their production becomes in this case unprofitable at the same time for both the producer and the consumer.

The turnover tax can be used for this purpose only when it is calculated as a percentage of the turnover in retail prices (less the trade discounts) or in fixed amounts from each unit of the item. In our country the method of calculating this payment as the difference between the retail price of the item (less the trade and marketing discounts) and the wholesale price of the enterprise for it is dominant. Here the turnover tax does not influence the profitability of production. It is used, in essence, only for the withdrawal for the revenue of the state budget of a certain portion of the net income which has been created in the socialist economy.

In recent years the tendency to replace the practice of levying the turnover tax in the form of the difference in prices with its withdrawal according to precentage rates has been observed in the economy of several European countries of the socialist community. Thus, in the CSSR goods, the tax on which is levied according to percentage rates, account for nearly half of the entire amount of the turnover tax, which is paid to the state budget.

In our opinion, the changeover from the calculation of the turnover tax as the difference in prices to its withdrawal according to percentage rates merits attention. It is possible to predict in advance the objections on the part of some economists, their references to the difficulty of withdrawing this payment for the budget according to percentage rates. Indeed, if only commodity-by-commodity tax rates are used, the interrelations of enterprises with the state budget will be complicated. Therefore group rates of it should also be used.

The main task is for the turnover tax, along with its basic function--the assurance of the formation of the revenue portion of the budget, which it has been successfully performing for more than 50 years now--to stimulate the increase of the efficiency of social production.

In recent years the level of profitability of individual sectors of industry has increased substantially: thus, in the gas industry it increased from 9.3 percent (in 1965) to 15.2 percent (in 1980), while in the oil drilling industry it increased accordingly from 5.7 to 8.6 percent. Here in every sector a significant portion of the enterprises have a profitability which exceeds by two- to threefold the average sectorial profitability.

The increase of the profitability of production in case of constant wholesale prices of industry leads to a change of the structure of these prices and to the increase of the proportion in them of the monetary accumulations. As a result of the absolute and relative increase of the profit the structure of the monetary accumulations also changes: the proportion of the turnover tax decreases and the proportion of the profit increases.

It is expedient, in our opinion, to broaden the sphere of use of the turnover tax, without confining it for the most part to the framework of subdivision II of social production. In this case all the associations and enterprises (including of heavy industry), which have a great profitability, should be the payers of the turnover tax.

Practical experience has shown that the economic stimulation of associations and enterprises is not connected with the fulfillment by them of the plan assignments on the turnover tax. They are interested in the increase of the profit and the

fulfillment of the plan precisely in accordance with this directive indicator, because the amounts of the deductions for the economic stimulation funds and for the covering of other expenses, which are envisaged by the financial plans of the enterprises and associations, depend on its fulfillment and exceeding.

There is no such interest in the fulfillment of the plan on the turnover tax. Thus, in 1980 six industrial enterprises of Ternopol Oblast did not fulfill the plan assignment with respect to this indicator, while they all exceeded the assignments on the profit. The Ternopol Podolyanka Leather Goods and Haberdashery Factory, for example, fulfilled the plan on the profit by 114.3 percent and on the turnover tax by 70.5 percent. In all 202,000 rubles less of the turnover tax were paid to the state budget than was planned.

Not only production associations and industrial enterprises, but also wholesale marketing organizations of industry, supply and marketing organizations, specialized wholesale organizations of the ministries of trade of the union republics, as well as other organizations, which operate on the basis of cost accounting and have an independent balance sheet and a current account at the bank, are the payers of the turnover tax.

The procedure of withdrawing for the revenue of the state budget of a significant portion of the turnover tax is not directly connected with the indicators of the financial and economic activity of the associations and enterprises of a number of sectors of industry (textile, sugar and others), because not only the producers of products, but also wholesale marketing and supply and marketing organizations pay it to the centralized fund of financial resources of the country. In this connection the production associations and industrial enterprises, in essence, do not bear either material or moral responsibility for the fulfillment of the plan on the turnover tax.

For the increase of their responsibility for the fulfillment of the plan assignments with respect to this indicator it is expedient to evaluate the results of the work of factories, plants and associations, which are the payers of the turnover tax, with allowance made for the fulfillment of the plan on all monetary accumulations, and not only on the profit, which is one of the components of the net income.

The further improvement of the prevailing procedure of calculating and using the turnover tax will promote the increase of its role in the economic mechanism of the country as an important tool of the active influencing of the increase of the efficiency of social production.

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IMPROVING INDICES MEASURING RENEWAL OF FIXED PRODUCTIVE CAPITAL

Moscow VESTNIK STATISTIKI in Russian No 3, Mar 83 pp 47-49

[Article by A. Gerasimenko, Kiev: "On the Question of Improving the Indicators of the Process of the Renewal of Fixed Capital"]

[Text] At the present time, economic literature distinguishes between indices measuring the state and indices measuring the use of fixed productive capital (OPF). The renewal of OPF is characterized, as a rule, by coefficients of renewal and removal. Sometimes investigators also utilize the coefficient of intensive renewal, which is calculated as the ratio of the coefficient of removal to the coefficient of renewal. Moreover, all of these indices are included as a component of the group of indices of the state of OPF.*

According to the methodology of the USSR Central Statistical Administration, the coefficient of renewal is determined by the ratio of the annual sum of the introduction of OPF to its presence at the end of the year, the coefficient of removal--by the ratio of the annual sum of the removal of OPF to its presence at the beginning of the year.

In our view, the methodology being used has important shortcomings. For example, it is incomprehensible what the relationship of the coefficient of intensive renewal and intensification consists of. If, as one can judge from the views of some economists, the factor of intensive renewal of OPF being characterized by the given coefficient is understood to mean the part of the newly introduced assets which go to replace those that have been removed, such a designation of the given coefficient can hardly be acknowledged as justified. It is well known that ". . .the intensity of newly introduced assets is determined not by whether they go for the expansion or the replacement of the production apparatus, but by the extent to which they increase the productivity of social labor".**

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*See, for example, L. L. Terekhov, S. P. Sidnev, "Effektivnost' osnovnykh fondov predpriyatiy" [The Efficiency of the Fixed Capital of Enterprises], Kiev, Vishcha shkola, 1978, pp 41-44.

**Yu. V. Kurenko, D. M. Palterovich, "Tekhnicheskiy progress i optimal'noye obnovleniye proizvodstvennogo apparata" [Technical Progress and the Optimal Renewal of the Production Apparatus], Moscow, Mysl', 1975, p 12.

Further. How competent in general is the use of the given coefficient for the characterization of the renewal of OPF. As has already been noted, in the calculations of the coefficient of renewal and the coefficient of removal, different bases are taken. This makes the essence of the coefficient of intensive renewal completely incomprehensible.

As we see, it is necessary to improve the tools for the calculation and analysis of the process of the renewal of OPF, which is possible by means of the development of a system of indices of its renewal. Moreover, this system must be theoretically and economically substantiated, and must not represent the totality of indices that have developed as the result of practical statistical and plan work.

According to economic theory, the reproduction of OPF includes productive use, amortization and renewal. This must be the point of departure for the development of indices that reflect the reproduction of OPF in general, as well as its individual processes, in particular their renewal.

The process of the renewal of OPF is characterized by the improvement of fixed productive capital in operation, which expresses itself in the replacement of obsolete and the expansion of operating capital through the introduction of additional means of labor. In mathematical form, this may be expressed as follows:

$$F_{kon} = F_{nach} - F_{vyb} + F_{nov},$$

where F_{kon} is the value of OPF at the end of the period; F_{nach} is the value of OPF at the beginning of the period; F_{vyb} is the value of OPF removed in the course of the period; F_{nov} is the value of OPF newly introduced into operation in the course of the period.

Thus, a system of six indices may be used for the calculation and analysis of the process of the renewal of OPF:

1. The coefficient of the novelty of OPF $K_{nov} = F_{nov} : F_{kon}$;
2. The coefficient of the scale of measures to renew the OPF $K_{massh} = F_{nov} : F_{nach}$;
3. The coefficient of the preservation of OPF $K_{sokh} = (F_{nach} - F_{vyb}) : F_{nach}$;
4. The coefficient of the renewal of OPF $K_{obn} = F_{nov} : F_{vyb}$;
5. The coefficient of the removal of OPF $K_{vyb} = F_{vyb} : F_{nach}$;
6. The index of the volume of OPF $I_f = F_{kon} : F_{nach}$.

The coefficients being proposed represent a system of interdependent indices (as is easy to notice, $K_{nov} = K_{massh} : I_f$, $K_{massh} = K_{obn} \times K_{vyb}$, $K_{vyb} = 1 - K_{sokh}$). The coefficient of the novelty of OPF makes it possible to characterize its renewal from the point of view of the novelty at the end of the period under review. At the present time, the coefficient of the renewal of OPF is defined as the ratio of the value of newly introduced assets to the value of assets available at the end of the period. This is not entirely correct: Renewal is the

replacement of the old for the new. For this reason it is more logical to define the coefficient of the renewal of OPF as the ratio of the value of the newly introduced (new) OPF to the value of that removed. The relationship of the value of newly introduced (new) OPF to the value of that available at the end of the period--this is the coefficient of the novelty of OPF.

The coefficient of the scale of measures to renew OPF is calculated as the ratio of the value of newly introduced assets to the value of fixed capital at the beginning of the period. On the one hand, this coefficient characterizes the renewal of OPF through the measurement of the share of new assets that go for the replacement of those replaced, as well as for the increase of the quantity of available assets. On the other hand, it gives the possibility of making judgments about the scale of measures to renew OPF. Let us assume, the value of OPF in one enterprise amounts to 10, in another--100 million rubles, and the value of newly introduced OPF in both the first and the second enterprises is 10 million rubles. Is the extent (scale, level) of the renewal of assets identical in these enterprises? The coefficient of scale makes it possible to answer such a question. The extent of the renewal of assets in the first enterprise is 10 times greater than at the second, since the coefficient of the scale of measures to renew OPF of the first enterprise is 10 times greater.

The coefficient of the preservation of OPF is calculated by means of the ratio of the difference of the values of the assets at the beginning of the period and the assets removed as the result of the renewal of its part to the value of OPF at the beginning of the period. It characterizes the renewal of OPF through the measurement of the share of assets at the beginning of the period being preserved for their further use.

The coefficient of the removal of OPF is determined as the ratio of the value of removed assets to the value of assets at the beginning of the period. It characterizes the renewal of OPF through the measurement of the share of fixed capital being removed.

The index of the volume of OPF (shop, enterprise, etc.), being calculated as the ratio of the value of fixed capital after renewal at the end of the period to the value of capital at the beginning of the period, yields an assessment of the movement of OPF and defines its direction.

In our view, the system being examined makes it possible to characterize the process of the renewal of OPF rather fully. Moreover, as the results of its approval show, it can be used in two ways. First of all, as a calendar-periodic system of indices for the investigation of the process of the renewal of OPF of economic units (the shop, enterprise, sector, etc.) during a given period. Secondly, for the investigation of the results of renewal in terms of individual forms of renewal (reconstruction, expansion, etc.) in a cross-section of enterprises, groups of enterprises, individual sectors, and the national economy (regions, republic, the country) as a whole.

As has already been noted, the process of the renewal of OPF has independent national economic significance. Taking this into account, we believe that the

indices reflecting it must be singled out from the group of indices of the state of OPF into an independent group of indices of the renewal of OPF.

We illustrate the use of the indices of the renewal of OPF for its calendar-periodic characteristic by means of data we have calculated for the renewal of the fixed industrial-productive capital of the industry of the USSR (see table)

Год	$K_{нов}$	$K_{масш}$	$K_{сохр}$	$K_{обн}$	$K_{выб}$	$I_ф$
1970	10,6	11,6	98,2	6,48	1,8	1,10
1971	10,8	11,8	97,3	4,35	2,7	1,09
1972	8,4	9,0	98,6	6,42	1,4	1,08
1973	9,8	10,7	98,3	6,31	1,7	1,09
1974	9,1	9,8	98,6	7,02	1,4	1,08
1975	9,9	10,8	98,4	6,73	1,6	1,09
1976	8,9	9,6	98,5	6,42	1,5	1,08
1977	7,9	8,4	98,5	5,62	1,5	1,07
1978	8,4	9,0	98,6	6,43	1,4	1,08
1979	8,2	8,8	98,6	6,28	1,4	1,07
1980	8,0	8,6	98,6	6,12	1,4	1,07

Key:

1. K_{nov}
2. K_{massh}
3. K_{sokh}
4. K_{obn}
5. K_{vyb}
6. I_f

From the data of the table it is evident that in 1980 the fixed industrial-productive capital of the industry of the USSR increased by 7 percent (I_f); 8 percent (K_{nov}) of the capital available at the end of 1980 were assets introduced in the course of this year, whose share in relation to the assets that were present at the beginning of the year constitute 8.6 percent.

Of the assets available at the beginning of 1980, 1.4 percent were removed in the course of the year (K_{vyb}), 98.6 percent were preserved (K_{sokh}). In exchange for the removed assets, new assets 6.12 times as great, were introduced into operation (K_{obn}). In an analogous manner, the change of the fixed industrial-productive capital of the industry of the country can be analyzed for other years as well.

In examining the process of the renewal of OPF as a whole during 1970-1980, it is evident that during this period it was characterized by rather stable high indices of their preservation and low indices of removal. Consequently, during the indicated years, the assets were renewed not as much by means of the replacement of old for new ones, as by means of the addition of new assets to the old ones. Moreover, a trend toward some reduction in the relative magnitude of the new assets (K_{nov}, K_{massh}, I_f diminished approximately by 3 points) was observed. In exchange for the removed assets during the various years of the period under review, new assets (K_{obn}) 4.35 to 7.02 times as great were put into operation.

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TABLES SHOW ECOMIC GROWTH IN COMPARISON WITH OTHER COUNTRIES

Moscow VESTNIK STATISTIKI in Russian No 7, Jul 83 pp 56-80. [Excerpt, pp 57-58, 63-64]

[Excerpts] Table 1. The Growth of the Socialist Economy (1913 = 1)

		1940	1970	1980	1982	1983 (план) (24)
(1)	Валовой общественный продукт . .	5,1	41	69	73	
(2)	Производственные основные фонды всех отраслей народного хозяйства	2,6	19,4	42,1	48,0	
(3)	Вся продукция промышленности . .	7,7	91,5	163	173	179
(4)	в том числе:					
(5)	топливная промышленность . .	6,5	41,1	63,6	65,6	66,6
(6)	черная металлургия	5,8	53,3	75,0	76,0	77,3
(7)	химическая и нефтехимическая промышленность	17,5	468	1 021	1 112	1 152
(8)	машиностроение и металлообработка	29,7	840	2 151	2 389	2 504
(9)	лесная, деревообрабатывающая и целлюлозно-бумажная промышленность (1932=1) . .	2,2	10,3	14,3	15,3	15,7
(10)	промышленность строительных материалов (1932=1) . . .	2,2	59,8	93,3	96,1	98,8
(11)	легкая промышленность . . .	4,7	22,3	33,1	34,0	34,9
(12)	пищевая и мукомольно-крупяная промышленность	3,8	16,2	22,4	23,7	24,5
(13)	Валовая продукция сельского хозяйства	1,4	3,1	3,4	3,5	
(14)	Грузооборот всех видов транспорта	3,9	31,4	53,8	56,4	58,3
	в том числе железнодорожного	5,5	32,6	45,0	45,3	46,3
(15)	Ввод в действие основных фондов (1940=1)	1	13,0	22,4	23,6	
(16)	Капитальные вложения (1940=1) .	1	12,5	20,8	22,3	22,5
(17)	Численность рабочих и служащих .	2,6	7,0	8,7	8,9	9,0
(18)	Производительность общественного труда	4,9	36	53	56	
(19)	Производительность труда:					
(20)	в промышленности	3,8	18,5	28,9	30,3	31,1
(21)	в сельском хозяйстве	1,9	5,3	6,3	6,4	
(22)	на железнодорожном транспорте	2,9	10,9	13,6	13,5	13,8
(23)	в строительстве (1940=1) . . .	1	4,5	6,4	6,7	6,9

Key:

1. Gross social product
2. Fixed production capital of all sectors of the national economy
3. Total production of industry
4. Including
5. Fuel industry
6. Ferrous metal industry
7. Chemical and petrochemical industry
8. Machine building and metal processing
9. Timber, pulp and paper, and wood processing industry (1932 = 1)
10. Construction materials industry (1932 = 1)
11. Light industry
12. Food and flour-and-cereals industry
13. Gross production of agriculture
14. Freight turnover of all types of transportation
15. Introduction of fixed assets (1940 = 1)
16. Capital investments (1940 = 1)
17. Number of workers and employees
18. Social labor productivity
19. Labor productivity
20. In industry
21. In agriculture
22. In railway transportation
23. In construction (1940 = 1)
24. Plan

In the assessment of the enormous successes of the development of the socialist economy, it must be remembered that during the existence of our state approximately 20 years were taken up by civil war, the intervention, and the Second World War and the periods of the restoration of our economy. According to incomplete data, the total sum of the damage inflicted on our country by military intervention and civil war amounted to one-fourth of the pre-war national wealth of Russia. The losses inflicted on our country during the Great Patriotic War came to approximately 30 percent of the national wealth.

The Soviet Union possesses enormous national wealth. During the years of Soviet power, the national wealth of the country (without the value of land, mineral wealth and forests) increased by a factor of 37 and constitutes 3.0 trillion rubles at the present time.

Fixed assets constitute the most important part of the national wealth of the country. They reflect the value of all buildings, installations, transmission equipment, machines, equipment, apparatus, instruments and other objects, which represent the material-technical base of the national economy.

During the years of Soviet power, the value of the fixed production assets increased by a factor of 51 and at the end of 1982 amounted to 1,311 billion rubles.

At present the fixed production assets double every 10 years, while for the same increase the United States needed about 20 years, Great Britain--19, and the Federal Republic of Germany--16 years.

"In the economic sphere, the key task is a cardinal increase of labor productivity. We must strive to attain in this plan the higher world level. Not without reason did Lenin in the final analysis consider it the most important,

the chief factor for the victory of the new social order (PSS [Polnoye sobranie sochineniy] [Collected Works], Vol 39, p 21). Now, in the conditions of the scientific-technical revolution, this task has assumed a special significance--both for our internal construction and in the international sphere." (From the speech of the general secretary of the CPSU Central Committee, comrade Yu. V. Andropov, at the Plenum of the CPSU Central Committee on 15 June 1983).

Table 2. The Relative Share of the Socialist Economy of the USSR (in %)

Item	1924	1928	1937	1966
In fixed production assets (including cattle)*	35.0	35.1	99.0	100
In national income*	35.0	44.0	99.1	100
In production of industry	76.3	82.4	99.8	100
In production of agriculture*	1.5	3.3	98.5	100
In retail commodity turnover of trade enterprises (including public catering)	47.3	76.4	100	100

*) Including subsidiary private agriculture of kolkhoz workers, workers and employees.

Table 3. One Day of the Country*

	1940	1970	1990	1982	(17) Число дней, необходимое в 1982 г. для производства продукции: (18) всего 1913 г.	(18) всего 1940 г.
(1) **Производство важнейших видов промышленной продукции**						
(2) Электроэнергия, млн. кВт · ч	133	2 030	3 535	3 745	0,5	13,0
(3) Нефть (включая газовый конденсат), тыс. т	85	987	1 618	1 678	6,1	18,5
(4) Газ естественный, млн. м³	8,5	342	1 189	1 372	—	2,3
(5) Уголь, тыс. т	433	1 710	1 957	1 967	14,8	84,4
(6) Чугун, тыс. т	41	235	293	292	14,4	51,0
(7) Сталь, тыс. т	50	318	401	403	10,7	45,5
(8) Минеральные удобрения (в пересчете на 100% питательных веществ), тыс. т	2,1	35,9	67,7	73,3	(19) около 6 часов	10
(9) Тракторы, штук	86	1 256	1 516	1 521	—	21
(10) Цемент, тыс. т	15,8	261	342	339	6	17
(11) Ткани всех видов, млн. м²	9,1	24,3	29,4	30,4	72	109
(12) Кожаная обувь, тыс. пар	580	1 860	2 030	2 012	34	105
(13) Часы, тыс. штук	7,6	110	182	189	3,7	15
(14) Радиоприемные устройства тыс. штук	0,5	21	23	24	—	7,3
(15) Телевизоры, тыс. штук	0,001	18	21	23	—	0,01
(16) Холодильники, тыс. штук	0,01	11	16	16	—	0,2

*) The indicators are calculated proceeding from the calendar number of days in the year.

Key:

1. Output of the most important types of industrial production
2. Electric power, in million of kilowatt hours
3. Oil (including gas condensate), in thousands of tons
4. Natural gas, in millions of cubic meters
5. Coal, in thousands of tons
6. Pig iron, in thousands of tons
7. Steel, in thousands of tons
8. Mineral fertilizer (recalculated per 100% of nutrient substances), in thousands of tons
9. Tractors, in units
10. Cement, in thousands of tons
11. Textiles of all types, in millions of square meters
12. Leather footwear, in thousands of pairs
13. Clocks, in thousands of units
14. Radio receivers, in thousands
15. Televisions, in thousands
16. Refrigerators, in thousands
17. Number of days needed in 1982 for the output of production
18. Total
19. About 6 hours

Now the entire volume of industrial output in 1913 is produced in the USSR in 2 days.

Table 4. Place Occupied by the Industry of the USSR in the World and in Europe in Terms of Total Production

		1913		1982	
		(23) В мире	(24) В Европе	(23) В мире	(24) В Европе
(1)	Вся промышленная продукция	5	4	2	1
(2)	Электроэнергия	8	6	2	1
(2)	Нефть (включая газовый конденсат)	2	1	1	1
		(25) Дореволюционная Россия производила незначительное количество			
(3)	Газ			2	1
(4)	Уголь (товарный)	6	5	2[1]	1
(5)	Чугун	5	4	1	1
(6)	Сталь	5	4	1	1
(7)	Железная руда	5	4	1	1
(8)	Кокс	4	3	1[1]	1
(9)	Продукция химической промышленности	...	...	2[1]	1[1]
(10)	Минеральные удобрения (в пересчете на 100% питательных веществ)	...	...	1	1
(11)	Серная кислота в моногидрате	...	...	2	1
(12)	Продукция машиностроения	4	3	2	1
		(26) Дореволюционная Россия не производила			
(13)	Магистральные тепловозы и электровозы			1[2]	1[1]
(14)	Тракторы (по суммарной мощности двигателей)	(27) То же		1	1
(15)	Вывозка древесины	2	1	1[2]	1[1]
(16)	Пиломатериалы	2	1	1	1
(17)	Цемент	3	4	1	1
		(28) Дореволюционная Россия не производила			
(18)	Сборные железобетонные конструкции и детали			1[1]	1[1]
(19)	Шерстяные ткани	...	...	1	1
(20)	Кожаная обувь	...	...	1	1
(21)	Сахар-песок (из отечественного сырья)	4	2	3[1]	1
(22)	Животное масло	...	...	1	1

1. 1981 2. 1980

Key:

1. Total industrial production
2. Electric power
2a. Oil (including gas condensate)
3. Gas
4. Coal (marketable)
5. Pig iron
6. Steel
7. Iron ore
8. Coke
9. Products of the chemical industry
10. Mineral fertilizer (recalculated per 100% of nutrient substances
11. Sulphuric acid in monohydrate
12. Production of machine building
13. Diesel and electric locomotive trunklines
14. Tractors (in terms of total engine capacity)
15. Removal of wood
16. Lumber
17. Cement
18. Prefabricated reinforced production and parts
19. Wool fabrics
20. Leather footwear
21. Sugar (granulated)
22. Animal oil
23. In the World
24. In Europe
25. Insignificant quantity produced in pre-revolutionary Russia
26. Not produced in pre-revolutionary Russia
27. Ditto
28. Not produced in pre-revolutionary Russia

Table 5. Correlation of the Production of the Most Important Types of Industrial Production of the USSR and Some Developed Capitalist Countries

	СССР в процентах к США			СССР в процентах к Великобритании, ФРГ и Франции, вместе взятым		
	1913[1]	1940	1982	1913[1]	1940	1982
(1) Электроэнергия (валовая выработка)	8	26	55	24	51	149
(2) Потребление электроэнергии в промышленности	13	35	91[3]	23	...	188[3]
(3) Нефть (включая газовый конденсат)	27	17	144	Добыча нефти незначительна		587
(4) Газ естественный	...	4	86	...	...	672
(5) Чугун	13	35	273	13	...	209
(6) Сталь	14	29	216	16	53	216
(7) Железная руда	15	40	376	14	59	1 116
(8) Минеральные удобрения (в пересчете на 100% питательных веществ)	3	64[6]	138	0,7	25[6]	262
(9) Химические волокна и нити	...	5	39	...	...	87
(10) Магистральные тепловозы и электровозы	...	...	107[3]	...	...	228[4]
(11) Тракторы (в физических единицах)	...	12	282[3]	...	...	257
(12) Зерноуборочные комбайны	...	27	332[3]	...	...	659[5]
(13) Цемент	13	26	181	20	30	177[3]
(14) Хлопчатобумажные ткани	41	37	217	...	...	427
(15) Шерстяные ткани	...	33	496	...	...	216
(16) Сахар-песок (из отечественного сырья)	103	80	142	...	...	76

1. In this table the data for 1913 are cited for the entire territory of the former Russian Empire.
2. 1981 3. 1980 4. 1977 5. 1978 6. 1938

Key:

1. Electric power (gross output)
2. Electric power demand in industry
3. Oil (including gas condensate)
4. Natural gas
5. Pig iron
6. Steel
7. Iron ore
8. Mineral fertilizer (recalculated per 100% of nutrient substances)
9. Chemical fibers and filaments
10. Diesel and electric locomotive trunklines
11. Tractors (in physical units)
12. Grain combines
13. Cement
14. Cotton fabrics
15. Wool fabrics
16. Granulated sugar (from domestic raw materials)
17. USSR in Percent
18. [Compared] to United States
19. [Compared] to Great Britain, FRG and France, Taken Together
20. Extraction of oil insignificant

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